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November 28, 2007
(PBW Project No. 1352)

VIA OVERNIGHT DELIVERY

Mr. Gary Miller, Remedial Project Manager
U.S. Environmental Protection Agency, Region 6
Superfund Division (6SF-AP)
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

FINAL
(INCLUDES MODIFICATIONS)

Re: Phase 1 Soil Investigation Data and Proposed Phase 2 Soil Investigation Activities,
Gulfco Marine Maintenance Site, Freeport, Texas

Dear Mr. Miller:

Per our recent discussions, this letter has been prepared to provide a summary of soil data collected as part of the Remedial Investigation/Feasibility Study (RI/FS) at the subject site (the Site), and to propose additional soil investigation activities to be performed on the basis of those data. This information is provided by Pastor, Behling & Wheeler, LLC (PBW) on behalf of LDL Coastal Limited LP (LDL), Chromalloy American Corporation (Chromalloy) and The Dow Chemical Company (Dow). In accordance with Paragraph 52 of the modified Unilateral Administrative Order for the Site, I certify that I have been fully authorized by the Respondents to submit these documents and to legally bind all Respondents thereto.

This letter includes the modifications requested by the United States Environmental Protection Agency (EPA) in a letter dated October 30, 2007, which approved (with modifications) the original version of this letter submitted on September 11, 2007.

EXISTING DATA SUMMARY

In accordance with Section 5.6.3 of the RI/FS Work Plan (the Work Plan), soil samples were collected for chemical analysis from the 0 to 6 inch and 1 to 2 foot depth intervals at 99 locations on the Site. The sample locations from that part of the Site south of Marlin Avenue (hereafter referred to as the South Area) are shown on Figure 1. The sample locations from that part of the Site north of Marlin Avenue (hereafter referred to as the North Area) are shown on Figure 2.

In accordance with the Work Plan provisions, the analytical data from these samples were used to evaluate the extent of contamination at the Site, and assess the need for additional soil sampling activities. This evaluation entailed a comparison to Preliminary Screening Values (PSVs) for soil as listed in Tables 15 or 16 of the Work Plan, subject to a comparison to background concentrations, as determined from Site-specific background samples or Texas-specific background concentrations provided in 30 TAC 350.51(m). The following soil data were used in this evaluation:



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- (1) Analytical data for the 0 to 6 inch and 1 to 2 foot depth interval samples from the westernmost grid column of the South Area sample grid (Grid Column A as shown on Figure 1) were used to evaluate the western extent of contamination in the South Area.
- (2) Analytical data for the 0 to 6 inch and 1 to 2 foot depth interval samples from the easternmost grid column of the South Area sample grid (Grid Column L as shown on Figure 1) were used to evaluate the eastern extent of contamination in the South Area.
- (3) Analytical data for the 1 to 2 foot depth interval samples from all locations were used to evaluate the vertical extent of contamination at the Site.

Since the lateral extent of soils in the North Area is bounded by the surrounding wetland areas (where wetland sediment samples were collected), the lateral extent of soil contamination in this area has been effectively been determined. The lateral and vertical extent of contamination in wetland sediments is being evaluated separate from this letter.

Site-specific background data were obtained from ten surface soil samples collected from within the approved background area approximately 2,000 feet east of the Site near the east end of Marlin Avenue. These samples were analyzed for selected metals, pesticides, and semi-volatile organic compounds (SVOCs). Results of these analyses are provided on the enclosed DVD. Pesticides, SVOCs, antimony and cadmium were not detected at sufficient frequencies in background soil samples to warrant the development of site-specific background values for these compounds. Site-specific background values were developed for all other metals analytes.

In order to evaluate the extent of contamination, chemical concentrations in perimeter samples (both horizontal and vertical as encompassed by the three data sets described above) were compared to PSVs and background data on an individual sample basis. Consistent with the approach described in Chapter 5 of EPA's *Guidance for Comparing Background and Chemical Concentrations in Soil for CERCLA Sites* (EPA, 2002) for single sample comparisons, tolerance intervals were calculated for the Site-specific background metal analytes. EPA 2002 refers to Gibbons, 1994 for a detailed discussion of the tolerance interval methodology. Appendix B provides the sections of Gibbons, 1994 describing tolerance limits and the tolerance limit calculation details for the Site-specific background metals data. These values were used in the evaluation of the three perimeter sample data groups as described below.

Western Extent of Contamination Evaluation

As noted above, the western extent of soil contamination in the South Area was evaluated based on analytical data for the 0 to 6 inch and 1 to 2 foot depth interval samples from the westernmost grid column of the South Area sample grid (Grid Column A on Figure 1). As shown on Table 1, the comparison values for each chemical of interest are the higher of its PSV or background value (where applicable). The PSVs listed in Table 1 are from Table 16 of the Work Plan, with adjustments for changes in TCEQ Protective Concentration Levels (PCLs) between 2005 and 2007, and a revision in the iron screening value based on an updated National Center for Environmental Assessment (NCEA) iron reference dose. The background values listed in Table 1 are the Texas-specific background concentrations provided in 30 TAC 350.51(m) and the Site-specific background values determined as described above.

Soil data from western perimeter samples (i.e., Grid Column A locations) are provided on the enclosed DVD. Table 3 lists the detected soil concentrations in these samples that exceed the Table 1 comparison values. These exceedences are also plotted by location on Figure 3. The Work Plan specifies that where exceedences are indicated at perimeter locations, then a minimum of two additional grids should be created outside the exceeding grid with a sample collected from one random location within each grid. The specified additional grids and proposed random locations within the grids are shown in Figure 3. As indicated thereon, the second grid column (going from east to west) for many grid rows falls entirely within the former commercial marina boat slip area, and as such soil samples are not proposed within these grids. Sampling methods and analyses for samples from the proposed locations shown in Figure 3 are described later in the Proposed Phase 2 Soil Investigation Activities section of this letter.

Eastern Extent of Contamination Evaluation

The eastern extent of soil contamination in the South Area was evaluated based on analytical data for the 0 to 6 inch and 1 to 2 foot depth interval samples from the easternmost grid column of the South Area sample grid (Grid Column L on Figure 1). Because the property east of the South Area (see Figure 1) is an operating industrial facility without ecological habitat, as previously discussed with you, it is proposed that ecological PSVs would not apply to the lateral extent evaluation in this area. Thus, the comparison values in Table 2, which include PSVs from Table 15 of the Work Plan with the ecological PSVs removed, were used for this evaluation. As for Table 1, the comparison values for each chemical of interest in Table 2 are the higher of its PSV or background value (where applicable).

Soil data from eastern perimeter samples (i.e., Grid Column L locations) are provided on the enclosed DVD. None of the detected concentrations in these samples exceeded the Table 2 comparison values. As a result, the eastern extent of soil contamination has been identified by existing data and no further soil investigation to the east is proposed.

Vertical Extent of Contamination Evaluation

The vertical extent of soil contamination in the South Area was evaluated based on analytical data for the 1 to 2 foot depth interval samples from all locations in the North and South Areas. The applicability of ecological PSVs for this vertical extent evaluation was assessed in Appendix C. As described therein, Site soils conditions suggest that there is limited potential for significant biological activity below a depth of two feet and representative Site ecological receptors typically do not burrow to this depth, regardless. Based on these considerations, human health PSVs (as reflected in Table 2) were used (with background) for the vertical extent of soil contamination evaluation. It should be noted, however, that the ecological risk assessment for the Site will be conducted using soil data from this area as appropriate.

Soil data from the 1 to 2 foot depth interval samples are provided on the enclosed DVD. Table 4 lists the detected soil concentrations in these samples that exceed the Table 2 comparison values. These exceedences are also plotted by location on Figure 4 for the South Area and Figure 5 for the North Area. The Work Plan specifies that where exceedences are indicated in soil samples from the 1 to 2 foot depth interval, then deeper soil samples will be collected to define the vertical extent, except that samples will not be collected from depths below: (1) the water table; or (2) the surface soil depth at the sample location as defined in 30 TAC 350.4(a)(88) (i.e., five feet). Accordingly, deeper soil samples are proposed at each of the locations listed in Table 4. Proposed sampling methods and analyses for these samples are described below.

PROPOSED PHASE 2 SOIL INVESTIGATION ACTIVITIES

Extent of Contamination Evaluation Samples

As noted previously, additional soil samples are proposed to evaluate the lateral or vertical extent of soil contamination at the following locations:

- Seven locations on the former commercial marina property (Lot 20) immediately west of the Site. These locations are labeled as L20SB01 through L20SB06 on Figure 3. The proposed depths and analytes for samples from these locations are listed in Table 5.
- Fifteen locations within the South Area of the Site. These locations are listed on Table 5 and are shown on Figure 4. Proposed depths and analytes for samples from these locations are also listed in Table 5.
- One location within the North Area of the Site (ND3SB04). This location is shown on Figure 5. The proposed sample depth and analytes are listed in Table 5.

At locations where samples are required from depths greater than 0.5 feet, soil borings will be advanced using auger or direct push methods and sampled continuously for lithologic description purposes. Sampling will be performed using hand sampling equipment (augers or trowels) at locations where a sample is only required from the 0 to 0.5 foot depth interval.

NE3MW05/NE3SB09 Area Samples

As previously discussed with you, three additional soil borings (SB-204, SB-205, and SB-206 as shown on Figure 6) are proposed in the vicinity of previous soil boring/monitoring well NE3MW05/NE3SB09 where subsurface debris (e.g., a section of large rope) was observed in the auger cuttings from the boring for this well.

These three additional borings are intended to further evaluate the presence and/or composition of debris in this area. Each boring will be advanced to approximately 1 foot below visible debris (assuming no refusal). Soil borings will be advanced using auger or direct push methods and sampled continuously for lithologic description purposes. If debris is encountered in a boring, soil samples for laboratory analysis will be collected (to the extent possible based on soil and debris type and debris thickness and depth) from 1 foot depth intervals immediately above the debris, immediately below the debris, and within the approximate center of the debris zone. If debris is not encountered in a boring, the boring will be advanced to a depth of 6 feet. Soil samples will be collected for laboratory analysis from the 1 to 2 foot, 3 to 4 foot, and 5 to 6 foot depth intervals from those borings (if any) in which debris is not observed. If refusal is encountered in a boring, a soil sample for laboratory analysis will be collected from the depth interval immediately above the refusal point and an additional boring will be advanced approximately five feet from the original boring. A soil sample will be collected for laboratory analysis from this additional boring at the depth interval corresponding to where refusal was encountered in the previous boring. Soils samples will not be collected for laboratory analysis from depth intervals where saturated conditions are observed. Laboratory analyses will include the full suite of soil analytes specified in Table B-1 of the Field Sampling Plan (VOCs, SVOCs, pesticides, metals, and PCBs).

Areas South of Fresh Water Pond

Three soil borings (SB-201, SB-202, and SB-203 on Figure 6) are also proposed further to the east (south of the Fresh Water Pond) at locations where scrap metal was observed at the ground surface. Soil borings at these locations will be advanced to a depth of two feet. Soil samples will be collected for laboratory analysis from the 0 to 0.5 foot and 1.5 to 2.0 foot depth intervals from those borings. Laboratory analyses will include the full suite of soil analytes specified in Table B-1 of the Field Sampling Plan (VOCs, SVOCs, pesticides, metals, and PCBs) except that VOC analyses are not proposed for the 0 to 0.5 foot depth interval.

Thank you for the opportunity to submit this information. Based on your approval of the previous version of this letter submitted on September 11, 2007, we have performed the sampling activities described herein and have initiated the indicated sample analyses.

Sincerely,

PASTOR, BEHLING & WHEELER, LLC



Eric F. Pastor, P.E.
Principal Engineer

cc: Ms. Luda Voskov - Texas Commission on Environmental Quality
Mr. Robert L. Iuliucci - Sequa Corporation
Mr. Brent Murray - Environmental Quality, Inc.
Mr. Rob Rouse - The Dow Chemical Company
Mr. Donnie Belote - The Dow Chemical Company
Mr. Allen Daniels - LDL Coastal Limited, LP
Mr. F. William Mahley - Strasburger & Price, LLP
Mr. James C. Morrise III - Thompson & Knight, LLP
Ms. Elizabeth Webb - Thompson & Knight, LLP

TABLES

TABLE 1 - WESTERN EXTENT EVALUATION COMPARISON VALUES⁽¹⁾

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 16 of RI/FS Work Plan ⁽²⁾							PSV	Potential Background Values		Extent Evaluation Comparison Value
	EPA Region 6 Soil Screening Criteria ⁽³⁾	Tot _{Soil} Comb ⁽⁴⁾	GW _{Soil} Class 3 ⁽⁵⁾	Air _{Soil} Inh-V ⁽⁶⁾	Air _{GW} Soil _{Inh-V} ⁽⁷⁾	EPA Ecological Soil Screening Level ⁽⁸⁾	TCEQ Ecological Benchmark ⁽⁹⁾		TCEQ ⁽¹⁰⁾	Site-Specific ⁽¹¹⁾	
METALS											
Aluminum	7.60E+04	6.5E+03 ⁽¹²⁾	8.6E+05 ⁽¹²⁾	---	---	---	5.00E+01 +	5.00E+01	3.00E+04	---	3.00E+04
Antimony	3.10E+01	1.50E+01	2.71E+02	---	---	2.70E-01 ***	5.00E+00 +	2.70E-01	1.00E+00	---	1.00E+00
Arsenic	3.90E-01	2.42E+01	2.51E+02	---	---	1.80E+01	3.70E+01 +	3.90E-01	5.90E+00	8.66E+00	8.66E+00
Barium	5.50E+03	7.84E+03 ⁽¹²⁾	2.22E+04	---	---	3.30E+02 *	5.00E+02 +	3.30E+02	3.00E+02	4.62E+02	4.62E+02
Beryllium	1.50E+02	3.76E+01	9.24E+01	---	---	2.10E+01 ***	1.00E+01 +	1.00E+01	1.50E+00	---	1.00E+01
Boron	1.60E+04	1.60E+04	---	---	---	---	5.00E-01 +	5.00E-01	3.00E+01	---	3.00E+01
Cadmium	3.90E+01	5.17E+01	7.55E+01	---	---	3.60E-01 ***	2.90E+01 +	3.60E-01	---	---	3.60E-01
Chromium	---	2.30E+04	1.20E+05	---	---	---	4.00E-01	4.00E-01	3.00E+01	2.40E+01	3.00E+01
Chromium (VI)	3.00E+01	1.22E+02	1.41E+03	---	---	8.10E+01 ***	---	3.00E+01	---	---	3.00E+01
Cobalt	9.00E+02	1.21E+03 ⁽¹²⁾	2.20E+04	---	---	1.30E+01	2.00E+01 +	1.30E+01	7.00E+00	---	1.30E+01
Copper	2.90E+03	5.48E+02	5.21E+04	---	---	---	6.10E+01	6.10E+01	1.50E+01	2.36E+01	6.10E+01
Iron	5.30E+03 ⁽¹³⁾	---	---	---	---	---	---	0.00E+00	1.50E+04	---	5.30E+03
Lead	4.00E+02	5.00E+02	1.51E+02	---	---	1.10E+01 **	5.00E+01 +	1.10E+01	1.50E+01	1.79E+01	1.79E+01
Lithium	1.60E+03	1.26E+03	---	---	---	---	2.00E+00 +	2.00E+00	---	3.62E+01	3.62E+01
Manganese	3.20E+03	3.41E+03	5.77E+04	---	---	---	5.00E+02 +	5.00E+02	3.00E+02	6.50E+02	6.50E+02
Mercury	2.30E+01	2.10E+00	3.90E-01	2.40E+00	1.80E+00	---	1.00E-01	1.00E-01	4.00E-02	3.50E-02	1.00E-01
Molybdenum	3.90E+02	1.56E+02	2.46E+03	---	---	---	2.00E+00 +	2.00E+00	---	7.40E-01	2.00E+00
Nickel	1.60E+03	8.32E+02	7.87E+03	---	---	---	3.00E+01 +	3.00E+01	1.00E+01	---	3.00E+01
Selenium	3.90E+02	3.08E+02	1.15E+02	---	---	---	1.00E+00 +	1.00E+00	3.00E-01	---	1.00E+00
Silver	3.90E+02	9.48E+01	2.39E+01	---	---	---	2.00E+00 +	2.00E+00	---	---	2.00E+00
Strontium	4.70E+04	4.41E+04	3.07E+04	---	---	---	---	3.07E+04	1.00E+02	---	3.07E+04
Thallium	---	6.30E+00	8.70E+01	---	---	---	1.00E+00 +	1.00E+00	9.30E+00	---	9.30E+00
Tin	---	3.53E+04	1.00E+06	---	---	---	5.00E+01 +	5.00E+01	9.00E-01	---	5.00E+01
Titanium	---	1.00E+06	---	---	---	---	---	1.00E+06	2.00E+03	---	1.00E+06
Vanadium	7.80E+01	2.91E+02	1.71E+05	---	---	7.80E+00 **	2.00E+00 +	2.00E+00	5.00E+01	---	5.00E+01
Zinc	2.30E+04	9.92E+03	1.18E+05	---	---	---	1.20E+02	1.20E+02	3.00E+01	1.27E+02	1.27E+02
PESTICIDES											
4,4'-DDD	2.40E+00	1.42E+01	6.48E+02	---	---	---	---	2.40E+00	---	---	2.40E+00
4,4'-DDE	1.70E+00	1.02E+01	5.89E+02	---	---	---	---	1.70E+00	---	---	1.70E+00
4,4'-DDT	1.70E+00	5.39E+00	7.37E+02	6.24E+02	2.22E+05	---	---	1.70E+00	---	---	1.70E+00
Aldrin	2.90E-02	4.97E-02	5.14E+00	4.27E+00	5.47E+02	---	---	2.90E-02	---	---	2.90E-02
alpha-BHC	9.00E-02	2.51E-01	3.96E-01	7.16E+00	5.44E+02	---	---	9.00E-02	---	---	9.00E-02
beta-BHC	3.20E-01	1.28E+01	3.69E+04	2.11E+03	1.00E+06	---	---	3.20E-01	---	---	3.20E-01
alpha-Chlordane	---	9.17E-01	1.45E+00	3.69E+01	4.24E+03	---	---	9.17E-01	---	---	9.17E-01
delta-BHC	---	2.85E+00	8.68E+00	5.22E+01	8.03E+03	---	---	2.85E+00	---	---	2.85E+00
Dieldrin	3.00E-02	1.45E-01	2.44E+00	1.63E+01	7.04E+03	3.20E-05 ***	---	3.20E-05	---	---	3.20E-05
Endosulfan I	---	4.65E+01	1.54E+03	9.59E+01	3.70E+04	---	---	4.65E+01	---	---	4.65E+01
Endosulfan II	---	2.72E+02	4.62E+03	---	---	---	---	2.72E+02	---	---	2.72E+02
Endosulfan sulfate	---	3.85E+02	2.33E+05	---	---	---	---	3.85E+02	---	---	3.85E+02

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	EPA Region 6 Soil Screening Criteria ⁽³⁾	TotSoil _{Comb} ⁽⁴⁾	GWSoil _{Class 3} ⁽⁵⁾	AirSoil _{Inh-V} ⁽⁶⁾	AirGWSoil _{Inh-V} ⁽⁷⁾	EPA Ecological Soil Screening Level ⁽⁸⁾	TCEQ Ecological Benchmark ⁽⁹⁾		TCEQ ⁽¹⁰⁾	Site-Specific ⁽¹¹⁾	
Endrin	1.80E+01	8.69E+00	3.75E+01	2.43E+02	7.92E+04	---	---	8.69E+00	---	---	8.69E+00
Endrin aldehyde	---	1.94E+01	3.14E+04	---	---	---	---	1.94E+01	---	---	1.94E+01
Endrin ketone	---	1.86E+01	2.55E+03	9.73E+02	1.00E+06	---	---	1.86E+01	---	---	1.86E+01
gamma-BHC (Lindane)	4.40E-01	1.11E+00	4.58E-01	2.99E+02	2.46E+04	---	---	4.40E-01	---	---	4.40E-01
gamma-Chlordane	---	7.30E+00	2.10E+03	5.00E+02	1.60E+05	---	---	7.30E+00	---	---	7.30E+00
Heptachlor	1.10E-01	1.27E-01	9.44E+00	4.69E+00	1.92E+02	---	---	1.10E-01	---	---	1.10E-01
Heptachlor epoxide	5.30E-02	2.37E-01	2.91E+00	1.22E+01	2.24E+03	---	---	5.30E-02	---	---	5.30E-02
Methoxychlor	3.10E+02	2.69E+02	6.21E+03	1.60E+04	1.00E+06	---	---	2.69E+02	---	---	2.69E+02
Toxaphene	4.40E-01	1.24E+00	5.75E+02	4.91E+02	4.43E+05	---	---	4.40E-01	---	---	4.40E-01
PCBs	2.22E-01	1.10E+00	5.30E+02	2.80E+01	4.00E+03	---	---	2.22E-01	---	---	2.22E-01
Aroclor-1016	3.93E+00	---	---	---	---	---	---	3.93E+00	---	---	3.93E+00
Aroclor-1221	2.22E-01	---	---	---	---	---	---	2.22E-01	---	---	2.22E-01
Aroclor-1232	2.22E-01	---	---	---	---	---	---	2.22E-01	---	---	2.22E-01
Aroclor-1242	2.22E-01	---	---	---	---	---	---	2.22E-01	---	---	2.22E-01
Aroclor-1248	2.22E-01	---	---	---	---	---	---	2.22E-01	---	---	2.22E-01
Aroclor-1254	2.22E-01	---	---	---	---	---	---	2.22E-01	---	---	2.22E-01
Aroclor-1260	2.22E-01	---	---	---	---	---	---	2.22E-01	---	---	2.22E-01
VOCs											
1,1,1,2-Tetrachloroethane	3.00E+00	3.89E+01	7.08E+01	4.66E+01	2.89E+02	---	---	3.00E+00	---	---	3.00E+00
1,1,1-Trichloroethane	1.40E+03	8.43E+03 ⁽¹²⁾	8.10E+01	1.74E+04 ⁽¹²⁾	9.15E+03 ⁽¹²⁾	---	---	8.10E+01	---	---	8.10E+01
1,1,2,2-Tetrachloroethane	3.80E-01	3.99E+00	1.15E+00	4.59E+00	1.44E+01	---	---	3.80E-01	---	---	3.80E-01
1,1,2-Trichloroethane	8.40E-01	1.04E+01	1.00E+00	1.15E+01	2.08E+01	---	---	8.40E-01	---	---	8.40E-01
1,1-Dichloroethane	5.90E+02	6.50E+02	4.62E+01	3.16E+03	1.75E+03	---	---	4.62E+01	---	---	4.62E+01
1,1-Dichloroethene	2.80E+02	1.14E+03 ⁽¹²⁾	2.50E+00	1.58E+03	4.53E+02	---	---	2.50E+00	---	---	2.50E+00
1,1-Dichloropropene	---	2.62E+01	6.72E+00	4.61E+01	1.83E+01	---	---	6.72E+00	---	---	6.72E+00
1,2,3-Trichloropropane	1.40E-03	8.68E-01	1.14E-01	1.43E+03	7.32E+03	---	---	1.40E-03	---	---	1.40E-03
1,2,4-Trichlorobenzene	6.80E+01	1.26E+02 ⁽¹²⁾	2.40E+02	1.55E+02 ⁽¹²⁾	1.38E+03 ⁽¹²⁾	---	2.00E+01	2.00E+01	---	---	2.00E+01
1,2,4-Trimethylbenzene	5.20E+01	6.79E+01	2.43E+03	6.90E+01	4.18E+02	---	---	5.20E+01	---	---	5.20E+01
1,2-Dibromo-3-chloropropane	4.60E-01	3.18E+00 ⁽¹²⁾	8.73E-02	4.17E+00	1.79E+01	---	---	8.73E-02	---	---	8.73E-02
1,2-Dibromoethane	2.80E-02	1.60E+00	1.03E-02	3.40E+00	1.02E+01	---	---	1.03E-02	---	---	1.03E-02
1,2-Dichlorobenzene	2.80E+02	3.89E+02	8.94E+02	4.10E+02	2.23E+03	---	---	2.80E+02	---	---	2.80E+02
1,2-Dichloroethane	3.50E-01	6.41E+00	6.86E-01	7.09E+00	5.85E+00	---	---	3.50E-01	---	---	3.50E-01
1,2-Dichloropropane	3.50E-01	3.14E+01	1.14E+00	3.16E+01	3.43E+01	---	7.00E+02	3.50E-01	---	---	3.50E-01
1,3,5-Trimethylbenzene	2.10E+01	5.87E+01	2.66E+03	5.95E+01	3.54E+02	---	---	2.10E+01	---	---	2.10E+01
1,3-Dichlorobenzene	9.30E+01	6.16E+01	3.37E+02	6.32E+01	1.13E+02	---	---	6.16E+01	---	---	6.16E+01
1,3-Dichloropropane	---	2.62E+01	3.22E+00	4.61E+01	1.16E+02	---	---	3.22E+00	---	---	3.22E+00
1,4-Dichlorobenzene	3.20E+00	2.53E+02	1.05E+02	9.15E+03	4.73E+04	---	2.00E+01	3.20E+00	---	---	3.20E+00
2,2-Dichloropropane	---	3.14E+01	6.04E+00	3.16E+01	3.30E+01	---	---	6.04E+00	---	---	6.04E+00
2-Butanone	3.20E+04	2.68E+04	1.46E+03	5.89E+04	3.51E+05	---	---	1.46E+03	---	---	1.46E+03
2-Chloroethylvinyl ether	---	2.33E+00	1.44E-01	2.37E+00	4.41E+00	---	---	1.44E-01	---	---	1.44E-01

TABLE 1 - WESTERN EXTENT EVALUATION COMPARISON VALUES⁽¹⁾

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 16 of RI/FS Work Plan ⁽²⁾						PSV	Potential Background Values		Extent Evaluation Comparison Value
	EPA Region 6 Soil Screening Criteria ⁽³⁾	TotSoil _{Comb} ⁽⁴⁾	GWSoil _{Class 3} ⁽⁵⁾	AirSoil _{Inh-V} ⁽⁶⁾	AirGWSoil _{Inh-V} ⁽⁷⁾	EPA Ecological Soil Screening Level ⁽⁸⁾	TCEQ Ecological Benchmark ⁽⁹⁾	TCEQ ⁽¹⁰⁾	Site-Specific ⁽¹¹⁾	
2-Chlorotoluene	1.60E+02	8.29E+02	4.53E+02	2.20E+03	9.20E+03	---	---	1.60E+02	---	---
2-Hexanone	---	5.60E+01	1.94E+02	5.66E+01	2.62E+02	---	---	5.60E+01	---	5.60E+01
4-Chlorotoluene	---	2.47E+00	5.40E+02	2.47E+00	1.13E+01	---	---	2.47E+00	---	2.47E+00
4-Isopropyltoluene	---	2.47E+03	1.16E+04	3.53E+03	2.80E+04	---	---	2.47E+03	---	2.47E+03
4-Methyl-2-pentanone	5.80E+03	5.37E+03	2.47E+02	2.98E+04	1.10E+05	---	---	2.47E+02	---	2.47E+02
Acetone	7.00E+04	5.42E+03	2.14E+03	5.85E+03	3.18E+04	---	---	2.14E+03	---	2.14E+03
Acrolein	1.00E-01	5.72E-01	1.18E+00	5.80E-01	8.78E+00	---	---	1.00E-01	---	1.00E-01
Acrylonitrile	2.10E-01	2.18E+00	1.67E-01	2.71E+00	7.35E+00	---	---	1.67E-01	---	1.67E-01
Benzene	6.60E-01	1.95E+01	1.28E+00	2.36E+01	1.68E+01	---	---	6.60E-01	---	6.60E-01
Bromobenzene	7.30E+01	9.40E+01 ⁽¹²⁾	2.89E+02	9.97E+01 ⁽¹²⁾	3.46E+02 ⁽¹²⁾	---	---	7.30E+01	---	7.30E+01
Bromodichloromethane	1.00E+00	9.79E+01	3.27E+00	---	---	---	---	1.00E+00	---	1.00E+00
Bromoform	6.20E+01	2.76E+02	3.16E+01	4.31E+02	1.82E+03	---	---	3.16E+01	---	3.16E+01
Bromomethane	3.90E+00	2.94E+01	6.54E+00	3.95E+01	1.14E+01	---	---	3.90E+00	---	3.90E+00
Butanol	6.10E+03	1.77E+03	2.63E+02	2.27E+03	2.75E+04	---	---	2.63E+02	---	2.63E+02
Carbon disulfide	7.20E+02	3.30E+03	6.79E+02	5.53E+03	1.75E+03	---	---	6.79E+02	---	6.79E+02
Carbon tetrachloride	2.40E-01	9.72E+00	3.09E+00	1.23E+01	6.31E+00	---	---	2.40E-01	---	2.40E-01
Chlorobenzene	3.20E+02	3.18E+02 ⁽¹²⁾	5.46E+01	3.95E+02 ⁽¹²⁾	8.18E+02 ⁽¹²⁾	---	4.00E+01	4.00E+01	---	4.00E+01
Chloroethane	3.00E+00	2.32E+04	1.55E+03	7.90E+04	2.37E+04	---	---	3.00E+00	---	3.00E+00
Chloroform	2.50E-01	8.01E+00	5.10E+01	8.01E+00	5.37E+00	---	---	2.50E-01	---	2.50E-01
Chloromethane	1.30E+00	8.40E+01	2.03E+01	1.02E+02	1.35E+01	---	---	1.30E+00	---	1.30E+00
cis-1,2-Dichloroethene	4.30E+01	7.24E+02	1.24E+01	6.26E+03	3.73E+03	---	---	1.24E+01	---	1.24E+01
cis-1,3-Dichloropropene	---	7.09E+00	3.32E-01	5.29E+01	5.87E+01	---	---	3.32E-01	---	3.32E-01
Dibromochloromethane	1.00E+00	7.23E+01	2.46E+00	---	---	---	---	1.00E+00	---	1.00E+00
Dibromomethane	1.40E+02	1.35E+02	5.65E+01	1.39E+02	4.72E+02	---	---	5.65E+01	---	5.65E+01
Dichlorodifluoromethane	9.40E+01	1.15E+04	1.20E+04	3.91E+04	9.42E+03	---	---	9.40E+01	---	9.40E+01
Ethylbenzene	2.30E+02	4.02E+03	3.82E+02	7.90E+03	1.10E+04	---	---	2.30E+02	---	2.30E+02
Hexachlorobutadiene	6.20E+00	1.20E+01	6.87E+01	1.50E+01	1.61E+02	---	---	6.20E+00	---	6.20E+00
Isopropylbenzene (Cumene)	3.70E+02	3.01E+03	1.74E+04	4.76E+03	4.04E+04	---	---	3.70E+02	---	3.70E+02
Methyl acetate	2.20E+04	4.48E+03	2.44E+03	4.74E+03	1.72E+04	---	---	2.44E+03	---	2.44E+03
Methyl iodide	---	5.19E+01	5.68E+00	9.47E+01	3.64E+01	---	---	5.68E+00	---	5.68E+00
Methylcyclohexane	1.40E+02	2.24E+04	7.78E+05	2.37E+04	1.17E+04	---	---	1.40E+02	---	1.40E+02
Methylene chloride	8.90E+00	2.64E+02	6.54E-01	3.92E+02	2.15E+02	---	---	6.54E-01	---	6.54E-01
Naphthalene	1.20E+02	1.24E+02	1.56E+03	1.38E+02	1.31E+03	---	---	1.20E+02	---	1.20E+02
n-Butylbenzene	1.40E-02	1.49E+03	6.07E+03	3.39E+03	2.91E+04	---	---	1.40E+02	---	1.40E+02
n-Propylbenzene	1.40E+02	1.63E+03	2.24E+03	3.25E+03	1.79E+04	---	---	1.40E+02	---	1.40E+02
o-Xylene	2.80E+02	2.17E+04	3.54E+03	2.50E+04	2.47E+05	---	---	2.80E+02	---	2.80E+02
sec-Butylbenzene	1.10E+02	1.55E+03	4.24E+03	2.95E+03	2.18E+04	---	---	1.10E+02	---	1.10E+02
Styrene	1.70E+03	7.04E+03	1.63E+02	1.23E+04	6.80E+04	---	3.00E+02 +	1.63E+02	---	1.63E+02
tert-Butyl methyl ether (MTBE)	1.70E+01	5.86E+02	3.11E+01	7.09E+02	6.64E+02	---	---	1.70E+01	---	1.70E+01
tert-Butylbenzene	1.30E+02	1.40E+03	5.00E+03	2.44E+03	1.64E+04	---	---	1.30E+02	---	1.30E+02
Tetrachloroethene	5.50E-01	8.54E+01	2.51E+00	3.18E+02	2.12E+02	---	---	5.50E-01	---	5.50E-01

TABLE 1 - WESTERN EXTENT EVALUATION COMPARISON VALUES⁽¹⁾

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 16 of RI/FS Work Plan ⁽²⁾							PSV	Potential Background Values		Extent Evaluation Comparison Value
	EPA Region 6 Soil Screening Criteria ⁽³⁾	TotSoil _{Comb} ⁽⁴⁾	GWSoil _{Class 3} ⁽⁵⁾	AirSoil _{Lab-V} ⁽⁶⁾	AirGWSoil _{Lab-V} ⁽⁷⁾	EPA Ecological Soil Screening Level ⁽⁸⁾	TCEQ Ecological Benchmark ⁽⁹⁾		TCEQ ⁽¹⁰⁾	Site-Specific ⁽¹¹⁾	
Toluene	5.20E+02	5.62E+03 ⁽¹²⁾	4.11E+02	3.95E+04 ⁽¹²⁾	4.12E+04 ⁽¹²⁾	---	2.00E+02	+ 2.00E+02	---	---	2.00E+02
trans-1,2-Dichloroethene	6.30E+01	1.30E+03	2.45E+01	6.26E+03	3.22E+03	---	2.45E+01	---	---	---	2.45E+01
trans-1,3-Dichloropropene	---	2.62E+01	1.79E+00	4.61E+01	4.82E+01	---	1.79E+00	---	---	---	1.79E+00
trans-1,4-Dichloro-2-butene	---	1.70E-01	---	1.70E-01	6.93E-01	---	1.70E-01	---	---	---	1.70E-01
Trichloroethene	4.30E-02	9.06E+01	1.68E+00	1.08E+02	7.06E+01	---	4.30E-02	---	---	---	4.30E-02
Trichlorofluoromethane	3.90E+02	1.16E+04	6.40E+03	2.21E+04	4.60E+03	---	3.90E+02	---	---	---	3.90E+02
Trichlorotrifluoroethane	5.60E+03	2.16E+05	1.00E+06	2.37E+05	6.46E+04	---	5.60E+03	---	---	---	5.60E+03
Vinyl acetate	4.30E+02	1.55E+03	2.67E+03	1.58E+03	2.00E+03	---	4.30E+02	---	---	---	4.30E+02
Vinyl chloride	4.30E-02	3.39E+00	1.11E+00	2.09E+01	2.62E+00	---	4.30E-02	---	---	---	4.30E-02
Xylene (total)	2.10E+02	7.53E+02	6.13E+03	7.90E+02	1.33E+03	---	2.10E+02	---	---	---	2.10E+02
SVOCs											
1,2Diphenylhydrazine/Azobenzen	6.10E-01	5.43E+00	1.62E+00	7.24E+01	6.96E+03	---	6.10E-01	---	---	---	6.10E-01
2,4,5-Trichlorophenol	6.10E+03	4.14E+03	1.69E+03	1.09E+04	4.07E+05	---	4.00E+00	+ 4.00E+00	---	---	4.00E+00
2,4,6-Trichlorophenol	4.40E+01	3.00E+02	2.97E+01	1.01E+03	2.29E+04	---	1.00E+01	1.00E+01	---	---	1.00E+01
2,4-Dichlorophenol	1.80E+02	1.94E+02	1.76E+01	6.83E+03	1.68E+05	---	1.76E+01	---	---	---	1.76E+01
2,4-Dimethylphenol	1.20E+03	8.80E+02	1.62E+02	2.60E+03	6.99E+04	---	1.62E+02	---	---	---	1.62E+02
2,4-Dinitrophenol	1.20E+02	1.33E+02	4.68E+00	---	---	---	2.00E+01	+ 4.68E+00	---	---	4.68E+00
2,4-Dinitrotoluene	1.20E+02	6.91E+00	2.66E-01	1.50E+01	3.14E+02	---	2.66E-01	---	---	---	2.66E-01
2,6-Dinitrotoluene	6.10E+01	6.91E+00	2.40E-01	2.21E+01	7.28E+02	---	2.40E-01	---	---	---	2.40E-01
2-Chloronaphthalene	3.90E+03	5.04E+03	3.35E+04	---	---	---	3.90E+03	---	---	---	3.90E+03
2-Chlorophenol	6.40E+01	3.64E+02	8.16E+01	3.24E+03	5.31E+04	---	6.40E+01	---	---	---	6.40E+01
2-Methylnaphthalene	---	2.52E+02	8.53E+02	---	---	---	2.52E+02	---	---	---	2.52E+02
2-Nitroaniline	1.80E+02	1.15E+01 ⁽¹²⁾	1.10E+01 ⁽¹²⁾	1.22E+01 ⁽¹²⁾	3.86E+02 ⁽¹²⁾	---	1.80E+02	---	---	---	1.10E+01
2-Nitrophenol	---	1.01E+02	6.73E+00	4.13E+02	1.19E+04	---	6.73E+00	---	---	---	6.73E+00
3,3'-Dichlorobenzidine	1.10E+00	1.04E+01	3.13E+00	---	---	---	1.10E+00	---	---	---	1.10E+00
3-Nitroaniline	---	1.91E+01	1.28E+00	4.61E+02	1.61E+04	---	1.28E+00	---	---	---	1.28E+00
4,6-Dinitro-2-methylphenol	---	2.05E+01	4.69E+00	2.42E+01	1.05E+03	---	4.69E+00	---	---	---	4.69E+00
4-Bromophenyl phenyl ether	---	2.68E-01	1.77E+01	5.01E+00	5.95E+02	---	2.68E-01	---	---	---	2.68E-01
4-Chloro-3-methylphenol	---	3.27E+02	2.26E+02	1.76E+04	1.00E+06	---	2.26E+02	---	---	---	2.26E+02
4-Chloroaniline	2.40E+02	1.96E+02	2.23E+01	7.38E+02	2.01E+04	---	2.23E+01	---	---	---	2.23E+01
4-Chlorophenyl phenyl ether	---	1.54E-01	1.60E+00	1.28E+00	4.19E+01	---	1.54E-01	---	---	---	1.54E-01
4-Nitroaniline	---	2.68E+01 ⁽¹²⁾	5.14E+00 ⁽¹²⁾	3.10E+01 ⁽¹²⁾	1.10E+03 ⁽¹²⁾	---	0.00E+00	---	---	---	5.14E+00
4-Nitrophenol	4.90E+02	5.12E+01	4.99E+00	8.31E+01	3.15E+03	---	7.00E+00	4.99E+00	---	---	4.99E+00
Acenaphthene	3.70E+03	2.97E+03	1.18E+04	---	---	---	2.00E+01	+ 2.00E+01	---	---	2.00E+01
Acenaphthylene	---	3.78E+03	2.04E+04	---	---	---	3.78E+03	---	---	---	3.78E+03
Acetophenone	1.70E+03	1.81E+03	4.12E+02	2.48E+03	2.95E+04	---	4.12E+02	---	---	---	4.12E+02
Aniline	8.50E+01	5.89E+01	1.83E+01	6.74E+01	1.64E+03	---	1.83E+01	---	---	---	1.83E+01
Anthracene	2.20E+04	1.77E+04	3.44E+05	---	---	---	1.77E+04	---	---	---	1.77E+04
Atrazine (Aatrex)	2.20E+00	2.12E+01	1.25E+00	1.74E+03	9.85E+04	---	1.25E+00	---	---	---	1.25E+00
Benzaldehyde	6.10E+03	2.40E+02	5.25E+02	2.47E+02	1.44E+03	---	2.40E+02	---	---	---	2.40E+02
Benzidine	2.10E-03	1.25E-02	5.46E-04	3.24E-02	1.15E+00	---	5.46E-04	---	---	---	5.46E-04

TABLE 1 - WESTERN EXTENT EVALUATION COMPARISON VALUES⁽¹⁾

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 16 of RI/FS Work Plan ⁽²⁾						PSV	Potential Background Values		Extent Evaluation Comparison Value
	EPA Region 6 Soil Screening Criteria ⁽³⁾	Tot Soil Comb ⁽⁴⁾	GW Soil Class 3 ⁽⁵⁾	Air Soil Inh-V ⁽⁶⁾	Air GW Soil Inh-V ⁽⁷⁾	EPA Ecological Soil Screening Level ⁽⁸⁾	TCEQ Ecological Benchmark ⁽⁹⁾	TCEQ ⁽¹⁰⁾	Site-Specific ⁽¹¹⁾	
Benzo(a)anthracene	6.20E-01	5.65E+00	8.87E+02	1.93E+03	1.00E+06	---	---	6.20E-01	---	6.20E-01
Benzo(a)pyrene	6.20E-02	5.64E-01	3.82E+02	4.36E+02	9.58E+05	---	---	6.20E-02	---	6.20E-02
Benzo(b)fluoranthene	6.20E-01	5.71E+00	3.01E+03	3.16E+03	1.00E+06	---	---	6.20E-01	---	6.20E-01
Benzo(g,h,i)perylene	---	1.78E+03	1.00E+06	---	---	---	1.78E+03	---	---	1.78E+03
Benzo(k)fluoranthene	6.20E+00	5.72E+01	3.08E+04	7.83E+04	1.00E+06	---	---	6.20E+00	---	6.20E+00
Benzoic acid	1.00E-05	3.54E+02	9.46E+03	3.55E+02	1.31E+04	---	---	3.54E+02	---	3.54E+02
Benzyl alcohol	1.80E+04	3.74E+03	8.79E+02	4.60E+03	1.41E+05	---	---	8.79E+02	---	8.79E+02
Biphenyl	3.00E+03	1.34E+02	1.27E+04	1.39E+02	2.72E+03	---	6.00E+01 +	6.00E+01	---	6.00E+01
Bis(2-Chloroethoxy)methane	---	2.46E+00	5.88E-01	5.81E+00	7.37E+01	---	---	5.88E-01	---	5.88E-01
Bis(2-Chloroethyl)ether	2.10E-01	1.38E+00	1.05E-01	1.84E+00	1.53E+01	---	---	1.05E-01	---	1.05E-01
Bis(2-Chloroisopropyl)ether	---	4.12E+01	9.50E+00	1.06E+02	8.20E+02	---	---	9.50E+00	---	9.50E+00
Bis(2-Ethylhexyl)phthalate	3.50E+01	4.32E+01	8.18E+03	---	---	---	---	3.50E+01	---	3.50E+01
Butyl benzyl phthalate	2.40E+02	5.72E+03	1.35E+05	1.28E+04	1.00E+06	---	---	2.40E+02	---	2.40E+02
Caprolactam	3.10E-04	1.67E+02	2.35E+03	1.68E+02	6.10E+03	---	---	1.67E+02	---	1.67E+02
Carbazole	2.40E+01	2.35E+02	2.28E+02	---	---	---	---	2.40E+01	---	2.40E+01
Chrysene	6.20E+01	5.60E+02	7.73E+04	3.04E+05	1.00E+06	---	---	6.20E+01	---	6.20E+01
Dibenz(a,h)anthracene	6.20E-02	5.49E-01	7.62E+02	1.01E+03	1.00E+06	---	---	6.20E-02	---	6.20E-02
Dibenzofuran	1.50E+02	2.66E+02	1.67E+03	---	---	---	---	1.50E+02	---	1.50E+02
Diethyl phthalate	4.90E+04	1.42E+03	7.79E+03	1.46E+03	7.00E+04	---	1.00E+02 +	1.00E+02	---	1.00E+02
Dimethyl phthalate	1.00E+05	6.59E+02	3.11E+03	6.68E+02	2.18E+04	---	2.00E+02	2.00E+02	---	2.00E+02
Di-n-butyl phthalate	6.10E-03	4.40E+03	1.66E+05	1.53E+04	1.00E+06	---	2.00E+02 +	2.00E+02	---	2.00E+02
Di-n-octyl phthalate	2.40E+03	2.55E+03 ⁽¹²⁾	1.00E+06	---	---	---	---	2.40E+03	---	2.40E+03
Fluoranthene	2.30E+03	2.32E+03	9.59E+04	---	---	---	---	2.30E+03	---	2.30E+03
Fluorene	2.60E+03	2.26E+03	1.49E+04	---	---	---	3.00E+01	3.00E+01	---	3.00E+01
Hexachlorobenzene	3.00E-01	1.02E+00	5.65E+01	9.80E+00	4.17E+02	---	---	3.00E-01	---	3.00E-01
Hexachlorocyclopentadiene	3.70E+02	7.16E+00	9.64E+02	7.29E+00	1.35E+02	---	1.00E+01 +	7.16E+00	---	7.16E+00
Hexachloroethane	3.50E+01	6.66E+01	9.18E+01	4.95E+02	6.93E+03	---	---	3.50E+01	---	3.50E+01
Indeno(1,2,3-cd)pyrene	6.20E-01	5.72E+00	8.67E+03	1.29E+04	1.00E+06	---	---	6.20E-01	---	6.20E-01
Isophorone	5.10E+02	1.25E+03	1.50E+02	1.38E+03	2.06E+04	---	---	1.50E+02	---	1.50E+02
Nitrobenzene	2.00E+01	2.99E+01	4.39E+00	2.90E+02	2.88E+03	---	4.00E+01	4.39E+00	---	4.39E+00
n-Nitrosodimethylamine	9.50E-03	5.46E-02	1.84E-03	1.01E-01	2.69E+00	---	---	1.84E-03	---	1.84E-03
n-Nitrosodi-n-propylamine	7.00E-02	4.00E-01	1.76E-02	---	---	---	---	1.76E-02	---	1.76E-02
n-Nitrosodiphenylamine	9.90E+01	5.71E+02	1.41E+02	---	---	---	2.00E+01	2.00E+01	---	2.00E+01
o-Cresol	3.10E+03	1.01E+03	3.56E+02	1.46E+03	3.77E+04	---	---	3.56E+02	---	3.56E+02
Pentachlorophenol	3.00E+00	2.42E+00	9.16E-01	2.33E+02	1.57E+04	1.80E-03 **	3.00E+00 +	1.80E-03	---	1.80E-03
Phenanthrene	---	1.71E+03	2.08E+04	---	---	---	---	1.71E+03	---	1.71E+03
Phenol	1.80E+04	1.59E+03	9.57E+02	1.72E+03	4.65E+04	---	3.00E+01	3.00E+01	---	3.00E+01
Pyrene	2.30E+03	1.70E+03	5.58E+04	---	---	---	---	1.70E+03	---	1.70E+03
Pyridine	6.10E+01	4.84E+01	3.45E+00	1.18E+02	4.08E+01	---	---	3.45E+00	---	3.45E+00

TABLE 1 - WESTERN EXTENT EVALUATION COMPARISON VALUES⁽¹⁾

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 16 of RI/FS Work Plan ⁽²⁾							PSV	Potential Background Values		Extent Evaluation Comparison Value
	EPA Region 6 Soil Screening Criteria ⁽³⁾	TotSoil _{Comb} ⁽⁴⁾	GWSoil _{Class 3} ⁽⁵⁾	AirSoil _{Inh-V} ⁽⁶⁾	AirGWSoil _{Inh-V} ⁽⁷⁾	EPA Ecological Soil Screening Level ⁽⁸⁾	TCEQ Ecological Benchmark ⁽⁹⁾		TCEQ ⁽¹⁰⁾	Site-Specific ⁽¹¹⁾	
Sulfate	---	---	---	---	---	---	---	NV	---	---	NV
Chloride	---	---	---	---	---	---	---	NV	---	---	NV

Notes:

1. All values in mg/kg.
2. Values from Table 16 of RI/FS Workplan unless indicated otherwise (updated to reflect changes in toxicity data from 2005 to 2007)
3. From EPA's "Region 6 Human Health Medium-Specific Screening Levels 2004-2005". Residential Value.
4. TotSoil_{Comb} PCL = TCEQ Protective Concentration Level for 30 acre source area Residential total soil combined pathway (includes inhalation; ingestion; dermal pathways).
5. GWSoil_{Class 3} PCL = TCEQ Protective Concentration Level for 30 acre source area Residential soil-to-groundwater leaching for Class 3 groundwater ingestion pathway.
6. AirSoil_{Inh-V} PCL = TCEQ Protective Concentration Level for 30 acre source area Residential soil-to-air pathway (inhalation of volatiles and particulates).
7. AirGW-Soil_{Inh-V} PCL = TCEQ Protective Concentration Level for 30 acre source area Residential soil and groundwater-to-air pathway (inhalation of volatiles and particulates).
8. From EPA's "Ecological Soil Screening Level". Values indicated with "*" are based on soil Invertebrates. Values indicated with "***" are based on avian wildlife.
Values indicated with "****" are based on mammalian wildlife. All other values are based on plants.
9. From Table 3-4 of TCEQ "Guidance for Conducting Ecological Risk Assessments at Remediation Sites in Texas". Values indicated with "+" are based on plant exposure.
All other values are based on earthworm exposure.
10. NV = No Preliminary Screening Value.
10. From 30 TAC 350.51(m)
11. 95% UTL calculated from site-specific background samples.
12. Updated from Table 16 of RI/FS Workplan to reflect changes in toxicity data from 2005 to 2007 indicated in TCEQ PCL tables.
13. Updated from Table 16 of RI/FS Workplan to reflect revised reference dose for iron.

TABLE 2 - VERTICAL AND EASTERN EXTENT EVALUATION COMPARISON VALUES⁽¹⁾

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 15 of RI/FS Workplan ⁽²⁾					PSV	Potential Background Values		Extent Evaluation Comparison Value
	EPA Region 6 Soil Screening Criteria ⁽³⁾	TotSoil _{Comb} ⁽⁴⁾	GWSoil _{Class 3} ⁽⁵⁾	AirSoil _{Inh-V} ⁽⁶⁾	AirGWSoil _{Inh-V} ⁽⁷⁾		TCEQ ⁽¹⁰⁾	Site-Specific ⁽¹¹⁾	
METALS									
Aluminum	1.00E+05	6.7E+04 ⁽¹²⁾	1.00E+06	---	---	6.70E+04	3.00E+04	---	6.70E+04
Antimony	4.50E+02	3.06E+02	2.71E+02	---	---	2.71E+02	1.00E+00	---	2.71E+02
Arsenic	1.80E+00	1.96E+02	2.51E+02	---	---	1.80E+00	5.90E+00	8.66E+00	8.66E+00
Barium	7.90E+04	8.9E+04 ⁽¹²⁾	2.22E+04	---	---	2.22E+04	3.00E+02	4.62E+02	2.22E+04
Beryllium	2.20E+03	2.47E+02	9.24E+01	---	---	9.24E+01	1.50E+00	---	9.24E+01
Boron	1.00E+05	1.92E+05	---	---	---	1.00E+05	3.00E+01	---	1.00E+05
Cadmium	5.60E+02	8.52E+02	7.55E+01	---	---	7.55E+01	---	---	7.55E+01
Chromium	5.00E+02	5.71E+04	1.20E+05	---	---	5.00E+02	3.00E+01	2.40E+01	5.00E+02
Chromium (VI)	7.10E+01	1.01E+03	1.41E+03	---	---	7.10E+01	---	---	7.10E+01
Cobalt	2.10E+03	7.3E+03 ⁽¹²⁾	6.6E+04 ⁽¹²⁾	---	---	2.10E+03	7.00E+00	---	2.10E+03
Copper	4.20E+04	3.69E+04	5.21E+04	---	---	3.69E+04	1.50E+01	2.36E+01	3.69E+04
Iron	1.00E+05	---	---	---	---	1.00E+05	1.50E+04	---	1.00E+05
Lead	8.00E+02	1.60E+03	1.51E+02	---	---	1.51E+02	1.50E+01	1.79E+01	1.51E+02
Lithium	2.30E+04	1.95E+04	---	---	---	1.95E+04	---	3.62E+01	1.95E+04
Manganese	3.50E+04	2.41E+04	5.13E+05	---	---	2.41E+04	3.00E+02	6.50E+02	2.41E+04
Mercury	3.40E+02	3.26E+00	3.91E-01	3.32E+00	2.57E+00	3.91E-01	4.00E-02	3.50E-02	3.91E-01
Molybdenum	5.70E+03	4.51E+03	7.33E+03	---	---	4.51E+03	---	7.40E-01	4.51E+03
Nickel	2.30E+04	7.94E+03	2.35E+04	---	---	7.94E+03	1.00E+01	---	7.94E+03
Selenium	5.70E+03	4.70E+03	1.15E+02	---	---	1.15E+02	3.00E-01	---	1.15E+02
Silver	5.70E-03	1.71E+03	7.15E+01	---	---	7.15E+01	---	---	7.15E+01
Strontium	1.00E+05	4.91E+05	9.18E+04	---	---	9.18E+04	1.00E+02	---	9.18E+04
Thallium	---	7.80E+01	8.70E+01	---	---	7.80E+01	9.30E+00	---	7.80E+01
Tin	---	3.97E+05	1.00E+06	---	---	3.97E+05	9.00E-01	---	3.97E+05
Titanium	---	1.00E+06	---	---	---	1.00E+06	2.00E+03	---	1.00E+06
Vanadium	1.10E+03	2.29E+03	5.11E+05	---	---	1.10E+03	5.00E+01	---	1.10E+03
Zinc	1.00E+05	2.45E+05	3.52E+05	---	---	1.00E+05	3.00E+01	1.27E+02	1.00E+05
PESTICIDES									
4,4'-DDD	1.10E+01	1.04E+02	1.45E+03	---	---	1.10E+01	---	---	1.10E+01
4,4'-DDE	7.80E+00	7.32E+01	1.32E+03	---	---	7.80E+00	---	---	7.80E+00
4,4'-DDT	7.80E+00	6.84E+01	1.65E+03	1.05E+03	3.72E+05	7.80E+00	---	---	7.80E+00
Aldrin	1.10E-01	9.70E-01	1.15E+01	7.17E+00	9.19E-02	1.10E-01	---	---	1.10E-01
alpha-BHC	4.00E-01	2.88E+00	8.86E-01	1.20E+01	9.14E+02	4.00E-01	---	---	4.00E-01
alpha-Chlordane	---	5.37E+01	8.27E+04	3.55E+03	1.00E+06	5.37E+01	---	---	5.37E+01
beta-BHC	1.40E+00	1.09E+01	3.24E+00	6.20E+01	7.12E+03	1.40E+00	---	---	1.40E+00
delta-BHC	---	1.15E+01	1.94E+01	8.77E+01	1.35E+04	1.15E+01	---	---	1.15E+01
Dieldrin	1.20E-01	1.14E+00	5.47E+00	2.74E+01	1.18E+04	1.20E-01	---	---	1.20E-01
Endosulfan I	---	1.22E+02	4.60E+03	1.34E+02	5.18E+04	1.22E+02	---	---	1.22E+02
Endosulfan II	---	4.09E+03	1.38E+04	---	---	4.09E+03	---	---	4.09E+03

TABLE 2 - VERTICAL AND EASTERN EXTENT EVALUATION COMPARISON VALUES⁽¹⁾

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 15 of RI/FS Workplan ⁽²⁾					PSV	Potential Background Values		Extent Evaluation Comparison Value
	EPA Region 6 Soil Screening Criteria ⁽³⁾	TotSoil _{Comb} ⁽⁴⁾	GWSoil _{Class 3} ⁽⁵⁾	AirSoil _{Inh-V} ⁽⁶⁾	AirGWSoil _{Inh-V} ⁽⁷⁾		TCEQ ⁽¹⁰⁾	Site-Specific ⁽¹¹⁾	
Endosulfan sulfate	---	4.09E+03	6.96E+05	---	---	4.09E+03	---	---	4.09E+03
Endrin	2.10E+02	1.27E+02	3.75E+01	3.40E+02	1.11E+05	3.75E+01	---	---	3.75E+01
Endrin aldehyde	---	2.04E+02	9.36E+04	---	---	2.04E+02	---	---	2.04E+02
Endrin ketone	---	1.77E+02	7.61E+03	1.36E+03	1.00E+06	1.77E+02	---	---	1.77E+02
gamma-BHC (Lindane)	1.90E+00	1.83E+01	4.58E-01	4.18E+02	3.45E+04	4.58E-01	---	---	4.58E-01
gamma-Chlordane	---	5.10E+01	4.60E+03	8.40E+02	2.60E+05	5.10E+01	---	---	5.10E+01
Heptachlor	4.30E-01	2.76E+00	9.44E+00	7.88E+00	3.22E+02	4.30E-01	---	---	4.30E-01
Heptachlor epoxide	2.10E-01	1.90E+00	2.91E+00	2.05E+01	3.77E+03	2.10E-01	---	---	2.10E-01
Methoxychlor	3.40E+03	2.96E+03	6.21E+03	2.25E+04	1.00E+06	2.96E+03	---	---	2.96E+03
Toxaphene	1.70E+00	1.70E+01	5.75E+02	8.26E+02	7.45E+05	1.70E+00	---	---	1.70E+00
PCBs	---	7.10E+00	5.30E+02	4.70E+01	6.80E+03	7.10E+00	---	---	7.10E+00
Aroclor-1016	2.40E+01	---	---	---	---	2.40E+01	---	---	2.40E+01
Aroclor-1221	8.30E-01	---	---	---	---	8.30E-01	---	---	8.30E-01
Aroclor-1232	8.30E-01	---	---	---	---	8.30E-01	---	---	8.30E-01
Aroclor-1242	8.30E-01	---	---	---	---	8.30E-01	---	---	8.30E-01
Aroclor-1248	8.30E-01	---	---	---	---	8.30E-01	---	---	8.30E-01
Aroclor-1254	8.30E-01	---	---	---	---	8.30E-01	---	---	8.30E-01
Aroclor-1260	8.30E-01	---	---	---	---	8.30E-01	---	---	8.30E-01
VOCs									
1,1,1,2-Tetrachloroethane	7.60E+00	7.3E+00 ⁽¹²⁾	2.6E+00 ⁽¹²⁾	7.7E+00 ⁽¹²⁾	2.4E+01 ⁽¹²⁾	2.60E+00	---	---	2.60E+00
1,1,1-Trichloroethane	1.40E+03	2.2E+04 ⁽¹²⁾	8.10E+01	2.4E+04 ⁽¹²⁾	1.3E+04 ⁽¹²⁾	8.10E+01	---	---	8.10E+01
1,1,2,2-Tetrachloroethane	9.70E-01	7.32E+00	2.59E+00	7.72E+00	2.42E+01	9.70E-01	---	---	9.70E-01
1,1,2-Trichloroethane	2.10E+00	1.86E+01	1.00E+00	1.93E+01	3.49E+01	1.00E+00	---	---	1.00E+00
1,1-Dichloroethane	2.30E+03	3.1E+03 ⁽¹²⁾	1.4E+02 ⁽¹²⁾	4.42E+03	2.46E+03	1.40E+02	---	---	1.40E+02
1,1-Dichloroethene	4.70E+02	2.12E+03	2.50E+00	2.21E+03	6.35E+02	2.50E+00	---	---	2.50E+00
1,1-Dichloropropene	---	6.09E+01	1.51E+01	7.74E+01	3.08E+01	1.51E+01	---	---	1.51E+01
1,2,3-Trichloropropane	3.40E-03	4.09E+00	2.56E-01	2.01E+03	1.02E+04	3.40E-03	---	---	3.40E-03
1,2,4-Trichlorobenzene	2.60E+02	2.1E+02 ⁽¹²⁾	2.40E+02	2.2E+02 ⁽¹²⁾	1.9E+03 ⁽¹²⁾	2.10E+02	---	---	2.10E+02
1,2,4-Trimethylbenzene	1.90E+02	9.65E+01	7.25E+03	9.67E+01	5.85E+02	9.65E+01	---	---	9.65E+01
1,2-Dibromo-3-chloropropane	2.20E+00	5.6E+00 ⁽¹²⁾	8.73E-02	5.84E+00	2.51E+01	8.73E-02	---	---	8.73E-02
1,2-Dibromoethane	7.00E-02	4.08E+00	1.03E-02	5.71E+00	1.71E+01	1.03E-02	---	---	1.03E-02
1,2-Dichlorobenzene	3.70E+02	5.71E+02	8.94E+02	5.74E+02	3.12E+03	3.70E+02	---	---	3.70E+02
1,2-Dichloroethane	8.40E-01	1.15E+01	6.86E-01	1.19E+01	9.83E+00	6.86E-01	---	---	6.86E-01
1,2-Dichloropropane	8.50E-01	4.42E+01	1.14E+00	4.42E+01	4.80E+01	8.50E-01	---	---	8.50E-01
1,3,5-Trimethylbenzene	7.80E+01	8.32E+01	7.94E+03	8.33E+01	4.95E+02	7.80E+01	---	---	7.80E+01
1,3-Dichlorobenzene	1.50E+02	8.82E+01	1.01E+03	8.84E+01	1.58E+02	8.82E+01	---	---	8.82E+01
1,3-Dichloropropane	---	6.09E+01	7.21E+00	7.74E+01	1.95E+02	7.21E+00	---	---	7.21E+00
1,4-Dichlorobenzene	8.10E+00	1.19E+03	1.05E+02	1.28E+04	6.62E+04	8.10E+00	---	---	8.10E+00

TABLE 2 - VERTICAL AND EASTERN EXTENT EVALUATION COMPARISON VALUES⁽¹⁾

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 15 of RI/FS Workplan ⁽²⁾					PSV	Potential Background Values		Extent Evaluation Comparison Value
	EPA Region 6 Soil Screening Criteria ⁽³⁾	Tot _{Soil} _{Comb} ⁽⁴⁾	GW _{Soil} _{Class 3} ⁽⁵⁾	Air _{Soil} _{Inh-V} ⁽⁶⁾	Air _{GW} _{Soil} _{Inh-V} ⁽⁷⁾		TCEQ ⁽¹⁰⁾	Site-Specific ⁽¹¹⁾	
2,2-Dichloropropane	---	4.42E+01	1.35E+01	4.42E+01	4.62E+01	1.35E+01	---	---	1.35E+01
2-Butanone	3.40E+04	7.26E+04	4.37E+03	8.24E+04	4.92E+05	4.37E+03	---	---	4.37E+03
2-Chloroethylvinyl ether	---	3.31E+00	3.23E-01	3.32E+00	6.17E+00	3.23E-01	---	---	3.23E-01
2-Chlorotoluene	5.10E+02	2.51E+03	1.35E+03	3.07E+03	1.29E+04	5.10E+02	---	---	5.10E+02
2-Hexanone	---	7.92E+01	5.78E+02	7.93E+01	3.67E+02	7.92E+01	---	---	7.92E+01
4-Chlorotoluene	---	3.46E+00	1.61E+03	3.46E+00	1.58E+01	3.46E+00	---	---	3.46E+00
4-Isopropyltoluene	---	4.71E+03	3.46E+04	4.94E+03	3.91E+04	4.71E+03	---	---	4.71E+03
4-Methyl-2-pentanone	1.70E+04	2.76E+04	7.39E+02	4.17E+04	1.54E+05	7.39E+02	---	---	7.39E+02
Acetone	1.00E+05	8.11E+03	6.38E+03	8.19E+03	4.45E+04	6.38E+03	---	---	6.38E+03
Acrolein	3.80E-01	8.11E-01	3.54E+00	8.13E-01	1.23E+01	3.80E-01	---	---	3.80E-01
Acrylonitrile	5.50E-01	4.19E+00	3.73E-01	4.55E+00	1.24E+01	3.73E-01	---	---	3.73E-01
Benzene	1.60E+00	3.69E+01	1.28E+00	3.97E+01	2.83E+01	1.28E+00	---	---	1.28E+00
Bromobenzene	1.20E+02	1.4E+02 ⁽¹²⁾	8.62E+02	1.4E+02 ⁽¹²⁾	4.8E+02 ⁽¹²⁾	1.20E+02	---	---	1.20E+02
Bromodichloromethane	2.60E+00	4.62E+02	7.33E+00	---	---	2.60E+00	---	---	2.60E+00
Bromoform	2.40E+02	6.04E+02	7.07E+01	7.24E+02	3.05E+03	7.07E+01	---	---	7.07E+01
Bromomethane	1.50E+01	5.32E+01	1.95E+01	5.53E+01	1.59E+01	1.50E+01	---	---	1.50E+01
Butanol	6.80E+04	3.08E+03	7.86E+02	3.17E+03	3.85E+04	7.86E+02	---	---	7.86E+02
Carbon disulfide	7.20E+02	7.19E+03	2.03E+03	7.74E+03	2.45E+03	7.20E+02	---	---	7.20E+02
Carbon tetrachloride	5.80E-01	1.89E+01	3.09E+00	2.06E+01	1.06E+01	5.80E-01	---	---	5.80E-01
Chlorobenzene	6.00E+02	5.4E+02 ⁽¹²⁾	5.46E+01	5.5E+02 ⁽¹²⁾	1.1E+03 ⁽¹²⁾	5.46E+01	---	---	5.46E+01
Chloroethane	7.20E+00	8.70E+04	4.61E+03	1.11E+05	3.32E+04	7.20E+00	---	---	7.20E+00
Chloroform	5.80E-01	1.35E+01	1.52E+02	1.35E+01	9.02E+00	5.80E-01	---	---	5.80E-01
Chloromethane	3.00E+00	1.59E+02	4.54E+01	1.72E+02	2.27E+01	3.00E+00	---	---	3.00E+00
cis-1,2-Dichloroethene	1.60E+02	4.72E+03	1.24E+01	8.77E+03	5.22E+03	1.24E+01	---	---	1.24E+01
cis-1,3-Dichloropropene	---	4.29E+01	7.44E-01	7.41E+01	8.22E+01	7.44E-01	---	---	7.44E-01
Dibromochloromethane	2.60E+00	3.41E+02	5.50E+00	---	---	2.60E+00	---	---	2.60E+00
Dibromomethane	5.90E+02	1.94E+02	1.26E+02	1.95E+02	6.61E+02	1.26E+02	---	---	1.26E+02
Dichlorodifluoromethane	3.40E+02	4.32E+04	3.58E+04	5.47E+04	1.32E+04	3.40E+02	---	---	3.40E+02
Ethylbenzene	2.30E+02	9.97E+03	3.82E+02	1.11E+04	1.54E+04	2.30E+02	---	---	2.30E+02
Hexachlorobutadiene	2.50E+01	2.28E+01	2.05E+02	2.51E+01	2.70E+02	2.28E+01	---	---	2.28E+01
Isopropylbenzene (Cumene)	5.80E+02	6.25E+03	5.19E+04	6.66E+03	5.66E+04	5.80E+02	---	---	5.80E+02
Methyl acetate	1.00E+05	6.59E+03	7.29E+03	6.63E+03	2.40E+04	6.59E+03	---	---	6.59E+03
Methyl iodide	---	1.21E+02	1.70E+01	1.33E+02	5.10E+01	1.70E+01	---	---	1.70E+01
Methylcyclohexane	1.40E+02	3.29E+04	1.00E+06	3.32E+04	1.63E+04	1.40E+02	---	---	1.40E+02
Methylene chloride	2.20E+01	5.62E+02	6.54E-01	6.59E+02	3.61E+02	6.54E-01	---	---	6.54E-01
Naphthalene	2.10E+02	1.90E+02	4.67E+03	1.93E+02	1.83E+03	1.90E+02	---	---	1.90E+02
n-Butylbenzene	2.40E+02	4.04E+03	1.81E+04	4.75E+03	4.08E+04	2.40E+02	---	---	2.40E+02
n-Propylbenzene	2.40E+02	4.10E+03	6.69E+03	4.55E+03	2.51E+04	2.40E+02	---	---	2.40E+02
o-Xylene	2.80E+02	3.44E+04	3.54E+03	3.49E+04	3.45E+05	2.80E+02	---	---	2.80E+02

TABLE 2 - VERTICAL AND EASTERN EXTENT EVALUATION COMPARISON VALUES⁽¹⁾

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 15 of RI/FS Workplan ⁽²⁾					PSV	Potential Background Values		Extent Evaluation Comparison Value
	EPA Region 6 Soil Screening Criteria ⁽³⁾	TotSoil _{Comb} ⁽⁴⁾	GWSoil _{Class 3} ⁽⁵⁾	AirSoil _{Inh-V} ⁽⁶⁾	AirGWSoil _{Inh-V} ⁽⁷⁾		TCEQ ⁽¹⁰⁾	Site-Specific ⁽¹¹⁾	
sec-Butylbenzene	2.20E+02	3.75E+03	1.27E+04	4.12E+03	3.05E+04	2.20E+02	---	---	2.20E+02
Styrene	1.70E+03	1.59E+04	1.63E+02	1.73E+04	9.52E+04	1.63E+02	---	---	1.63E+02
tert-Butyl methyl ether (MTBE)	4.10E+01	1.11E+03	9.28E+01	1.19E+03	1.12E+03	4.10E+01	---	---	4.10E+01
tert-Butylbenzene	3.90E+02	3.15E+03	1.49E+04	3.42E+03	2.30E+04	3.90E+02	---	---	3.90E+02
Tetrachloroethene	1.70E+00	2.71E+02	2.51E+00	5.34E+02	3.56E+02	1.70E+00	---	---	1.70E+00
Toluene	5.20E+02	3.3E+04 ⁽¹²⁾	4.11E+02	5.5E+04 ⁽¹²⁾	5.8E+04 ⁽¹²⁾	4.11E+02	---	---	4.11E+02
trans-1,2-Dichloroethene	2.40E+02	6.13E+03	2.45E+01	8.77E+03	4.51E+03	2.45E+01	---	---	2.45E+01
trans-1,3-Dichloropropene	---	6.09E+01	4.02E+00	7.74E+01	8.10E+01	4.02E+00	---	---	4.02E+00
trans-1,4-Dichloro-2-butene	---	2.85E-01	---	2.85E-01	1.16E+00	2.85E-01	---	---	2.85E-01
Trichloroethene	1.00E-01	1.70E+02	1.68E+00	1.82E+02	1.19E+02	1.00E-01	---	---	1.00E-01
Trichlorofluoromethane	1.40E+03	2.81E+04	1.91E+04	3.09E+04	6.44E+03	1.40E+03	---	---	1.40E+03
Trichlorotrifluoroethane	5.60E+03	3.28E+05	1.00E+06	3.32E+05	9.04E+04	5.60E+03	---	---	5.60E+03
Vinyl acetate	1.60E+03	2.21E+03	7.97E+03	2.21E+03	2.79E+03	1.60E+03	---	---	1.60E+03
Vinyl chloride	4.30E-01	1.24E+01	1.11E+00	3.52E+01	4.40E+00	4.30E-01	---	---	4.30E-01
Xylene (total)	2.10E+02	1.10E+03	6.13E+03	1.11E+03	1.86E+03	2.10E+02	---	---	2.10E+02
SVOCs									
1,2Diphenylhydrazine/Azobenzen	2.40E+00	1.99E+01	3.62E+00	1.22E+02	1.17E+04	2.40E+00	---	---	2.40E+00
2,4,5-Trichlorophenol	6.80E+04	1.25E+04	5.05E+03	1.53E+04	5.70E+05	5.05E+03	---	---	5.05E+03
2,4,6-Trichlorophenol	1.70E+02	8.58E+02	6.65E+01	1.70E+03	3.84E+04	6.65E+01	---	---	6.65E+01
2,4-Dichlorophenol	2.10E+03	1.68E+03	5.25E+01	9.56E+03	2.36E+05	5.25E+01	---	---	5.25E+01
2,4-Dimethylphenol	1.40E+04	2.87E+03	4.83E+02	3.63E+03	9.78E+04	4.83E+02	---	---	4.83E+02
2,4-Dinitrophenol	1.40E+03	1.36E+03	1.40E+01	---	---	1.40E+01	---	---	1.40E+01
2,4-Dinitrotoluene	1.40E+03	2.06E+01	5.96E-01	2.09E+01	4.40E+02	5.96E-01	---	---	5.96E-01
2,6-Dinitrotoluene	6.80E+02	2.81E+01	5.39E-01	3.10E+01	1.02E+03	5.39E-01	---	---	5.39E-01
2-Chloronaphthalene	2.60E+04	4.96E+04	1.00E+05	---	---	2.60E+04	---	---	2.60E+04
2-Chlorophenol	2.60E+02	2.40E+03	2.44E+02	4.53E+03	7.44E+04	2.44E+02	---	---	2.44E+02
2-Methylnaphthalene	---	2.48E+03	2.55E+03	---	---	2.48E+03	---	---	2.48E+03
2-Nitroaniline	2.00E+03	1.7E+01 ⁽¹²⁾	3.3E+01 ⁽¹²⁾	1.7E+01 ⁽¹²⁾	5.4E+02 ⁽¹²⁾	1.70E+01	---	---	1.70E+01
2-Nitrophenol	---	4.06E+02	2.01E+01	5.78E+02	1.67E+04	2.01E+01	---	---	2.01E+01
3,3'-Dichlorobenzidine	4.30E+00	4.24E+01	7.02E+00	---	---	4.30E+00	---	---	4.30E+00
3-Nitroaniline	---	1.55E+02	3.82E+00	6.45E+02	2.25E+04	3.82E+00	---	---	3.82E+00
4,6-Dinitro-2-methylphenol	---	3.31E+01	1.40E+01	3.39E+01	1.47E+03	1.40E+01	---	---	1.40E+01
4-Bromophenyl phenyl ether	---	1.10E+00	3.96E+01	8.42E+00	9.99E+02	1.10E+00	---	---	1.10E+00
4-Chloro-3-methylphenol	---	2.99E+03	6.76E+02	2.46E+04	1.00E+06	6.76E+02	---	---	6.76E+02
4-Chloroaniline	2.70E+03	7.49E+02	6.66E+01	1.03E+03	2.81E+04	6.66E+01	---	---	6.66E+01
4-Chlorophenyl phenyl ether	---	7.99E-01	3.58E+00	2.15E+00	7.04E+01	7.99E-01	---	---	7.99E-01
4-Nitroaniline	---	4.3E+01 ⁽¹²⁾	1.2E+01 ⁽¹²⁾	4.3E+01 ⁽¹²⁾	1.5E+03 ⁽¹²⁾	1.20E+01	---	---	1.20E+01
4-Nitrophenol	5.50E+03	1.07E+02	1.49E+01	1.16E+02	4.41E+03	1.49E+01	---	---	1.49E+01
Acenaphthene	3.30E+04	3.72E+04	3.53E+04	---	---	3.30E+04	---	---	3.30E+04

TABLE 2 - VERTICAL AND EASTERN EXTENT EVALUATION COMPARISON VALUES⁽¹⁾

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 15 of RI/FS Workplan ⁽²⁾					PSV	Potential Background Values		Extent Evaluation Comparison Value
	EPA Region 6 Soil Screening Criteria ⁽³⁾	Tot ⁴⁾ Soil _{Comb}	GW ⁵⁾ Soil _{Class 3}	Air ⁶⁾ Soil _{Inh-V}	Air ⁷⁾ GW ⁸⁾ Soil _{Inh-V}		TCEQ ⁽¹⁰⁾	Site-Specific ⁽¹¹⁾	
Acenaphthylene	---	3.72E+04	6.10E+04	---	---	3.72E+04	---	---	3.72E+04
Acetophenone	1.70E+03	3.30E+03	1.23E+03	3.47E+03	4.13E+04	1.23E+03	---	---	1.23E+03
Aniline	3.40E+02	9.25E+01	4.09E+01	9.43E+01	2.30E+03	4.09E+01	---	---	4.09E+01
Anthracene	1.00E+05	1.86E+05	1.00E+06	---	---	1.00E+05	---	---	1.00E+05
Atrazine (Aatrex)	8.60E+00	8.59E+01	1.25E+00	2.44E+03	1.38E+05	1.25E+00	---	---	1.25E+00
Benzaldehyde	6.80E+04	3.44E+02	1.57E+03	3.46E+02	2.02E+03	3.44E+02	---	---	3.44E+02
Benzidine	8.30E-03	3.29E-02	1.22E-03	5.45E-02	1.94E-00	1.22E-03	---	---	1.22E-03
Benzo(a)anthracene	2.30E+00	2.36E+01	1.99E+03	3.24E+03	1.00E+06	2.30E+00	---	---	2.30E+00
Benzo(a)pyrene	2.30E-01	2.37E+00	3.82E+02	7.32E+02	1.00E+06	2.30E-01	---	---	2.30E-01
Benzo(b)fluoranthene	2.30E+00	2.36E+01	6.73E+03	5.31E+03	1.00E+06	2.30E+00	---	---	2.30E+00
Benzo(g,h,i)perylene	---	1.86E+04	1.00E+06	---	---	1.86E+04	---	---	1.86E+04
Benzo(k)fluoranthene	2.30E+01	2.37E+02	6.89E+04	1.32E+05	1.00E+06	2.30E+01	---	---	2.30E+01
Benzoic acid	1.00E+05	4.96E+02	2.83E+04	4.97E+02	1.83E+04	4.96E+02	---	---	4.96E+02
Benzyl alcohol	1.00E+05	6.25E+03	2.62E+03	6.44E+03	1.98E+05	2.62E+03	---	---	2.62E+03
Biphenyl	2.60E+04	1.94E+02	3.78E+04	1.95E+02	3.81E+03	1.94E+02	---	---	1.94E+02
Bis(2-Chloroethoxy)methane	---	6.25E+00	1.32E+00	9.76E+00	1.24E+02	1.32E+00	---	---	1.32E+00
Bis(2-Chloroethyl)ether	6.20E-01	2.77E+00	2.36E-01	3.10E+00	2.57E+01	2.36E-01	---	---	2.36E-01
Bis(2-Chloroisopropyl)ether	---	1.08E+02	2.13E+01	1.79E+02	1.38E+03	2.13E+01	---	---	2.13E+01
Bis(2-Ethylhexyl)phthalate	1.40E+02	5.63E+02	8.18E+03	---	---	1.40E+02	---	---	1.40E+02
Butyl benzyl phthalate	2.40E+02	1.58E+04	4.03E+05	1.80E+04	1.00E+06	2.40E+02	---	---	2.40E+02
Caprolactam	1.00E+05	2.35E+02	7.01E+03	2.35E+02	8.54E+03	2.35E+02	---	---	2.35E+02
Carbazole	9.60E+01	9.54E+02	5.12E+02	---	---	9.60E+01	---	---	9.60E+01
Chrysene	2.30E+02	2.36E+03	1.73E+05	5.11E+05	1.00E+06	2.30E+02	---	---	2.30E+02
Dibenz(a,h)anthracene	2.30E-01	2.37E+00	1.07E+03	1.70E+03	1.00E+06	2.30E-01	---	---	2.30E-01
Dibenzofuran	1.70E+03	2.73E+03	4.98E+03	---	---	1.70E+03	---	---	1.70E+03
Diethyl phthalate	1.00E+05	2.04E+03	2.33E+04	2.05E+03	9.79E+04	2.04E+03	---	---	2.04E+03
Dimethyl phthalate	1.00E+05	9.33E+02	9.29E+03	9.35E+02	3.05E+04	9.33E+02	---	---	9.33E+02
Di-n-butyl phthalate	6.80E+04	1.62E+04	4.95E+05	2.14E+04	1.00E+06	1.62E+04	---	---	1.62E+04
Di-n-octyl phthalate	2.70E+04	2.5E+04 ⁽¹²⁾	1.00E+06	---	---	2.5E+04	---	---	2.5E+04
Fluoranthene	2.40E+04	2.48E+04	2.86E+05	---	---	2.40E+04	---	---	2.40E+04
Fluorene	2.60E+04	2.48E+04	4.46E+04	---	---	2.48E+04	---	---	2.48E+04
Hexachlorobenzene	1.20E+00	6.91E+00	5.65E+01	1.65E+01	7.00E+02	1.20E+00	---	---	1.20E+00
Hexachlorocyclopentadiene	4.10E+03	1.02E+01	9.64E+02	1.02E+01	1.89E+02	1.02E+01	---	---	1.02E+01
Hexachloroethane	1.40E+02	5.16E+02	2.74E+02	8.32E+02	1.16E+04	1.40E+02	---	---	1.40E+02
Indeno(1,2,3-cd)pyrene	2.30E+00	2.37E+01	1.94E+04	2.17E+04	1.00E+06	2.30E+00	---	---	2.30E+00
Isophorone	2.00E+03	1.90E+03	3.36E+02	1.93E+03	2.89E+04	3.36E+02	---	---	3.36E+02
Nitrobenzene	1.10E+02	1.85E+02	1.31E+01	4.05E+02	4.03E+03	1.31E+01	---	---	1.31E+01
n-Nitrosodimethylamine	3.80E-02	1.30E-01	4.13E-03	1.69E-01	4.52E+00	4.13E-03	---	---	4.13E-03

TABLE 2 - VERTICAL AND EASTERN EXTENT EVALUATION COMPARISON VALUES⁽¹⁾

Chemicals of Interest	Potential Preliminary Screening Values (PSVs) from Table 15 of RI/FS Workplan ⁽²⁾					PSV	Potential Background Values		Extent Evaluation Comparison Value
	EPA Region 6 Soil Screening Criteria ⁽³⁾	TotSoil _{Comb} ⁽⁴⁾	GWSoil _{Class 3} ⁽⁵⁾	AirSoil _{Inh-V} ⁽⁶⁾	AirGWSoil _{Inh-V} ⁽⁷⁾		TCEQ ⁽¹⁰⁾	Site-Specific ⁽¹¹⁾	
n-Nitrosodi-n-propylamine	2.70E-01	1.36E+00	3.95E-02	---	---	3.95E-02	---	---	3.95E-02
n-Nitrosodiphenylamine	3.90E+02	1.95E+03	3.16E+02	---	---	3.16E+02	---	---	3.16E+02
o-Cresol	3.40E+04	1.92E+03	1.06E+03	2.04E+03	5.28E+04	1.06E+03	---	---	1.06E+03
Pentachlorophenol	1.00E+01	1.06E+02	9.16E-01	3.26E+02	2.20E+04	9.16E-01	---	---	9.16E-01
Phenanthrene	---	1.86E+04	6.21E+04	---	---	1.86E+04	---	---	1.86E+04
Phenol	1.00E+05	2.38E+03	2.86E+03	2.41E+03	6.51E+04	2.38E+03	---	---	2.38E+03
Pyrene	3.20E+04	1.86E+04	1.67E+05	---	---	1.86E+04	---	---	1.86E+04
Pyridine	6.80E+02	1.43E+02	1.03E+01	1.66E+02	5.71E+01	1.03E+01	---	---	1.03E+01
Sulfate	---	---	---	---	---	NV	---	---	NV
Chloride	---	---	---	---	---	NV	---	---	NV

Notes:

1. All values in mg/kg.
2. Values from Table 15 of RI/FS Workplan unless indicated otherwise (updated to reflect changes in toxicity data from 2005 to 2007)
3. From EPA's "Region 6 Human Health Medium-Specific Screening Levels 2004-2005". Industrial Outdoor Worker.
4. TotSoil_{Comb} PCL = TCEQ Protective Concentration Level for 30 acre source area Commercial/Industrial total soil combined pathway (includes inhalation; ingestion; dermal pathways).
5. GWSoil_{Class 3} PCL = TCEQ Protective Concentration Level for 30 acre source area Commercial/Industrial soil-to-groundwater leaching for Class 3 groundwater ingestion pathway.
6. AirSoil_{Inh-V} PCL = TCEQ Protective Concentration Level for 30 acre source area Commercial/Industrial soil-to-air pathway (inhalation of volatiles and particulates).
7. AirGWSoil_{Inh-V} PCL = TCEQ Protective Concentration Level for 30 acre source area Commercial/Industrial soil and groundwater-to-air pathway (inhalation of volatiles and particulates).
8. From EPA's "Ecological Soil Screening Level". Values indicated with "*" are based on soil invertebrates. Values indicated with "***" are based on avian wildlife.
Values indicated with "****" are based on mammalian wildlife. All other values are based on plants.
9. From Table 3-4 of TCEQ "Guidance for Conducting Ecological Risk Assessments at Remediation Sites in Texas". Values indicated with "+" are based on plant exposure.
All other values are based on earthworm exposure.
10. NV = No Preliminary Screening Value.
11. From 30 TAC 350.51(m)
12. 95% UTL calculated from site-specific background samples.
13. Updated from Table 15 of RI/FS Workplan to reflect changes in toxicity data from 2005 to 2007 indicated in TCEQ PCL tables.

**TABLE 3 - DETECTED SOIL CONCENTRATIONS EXCEEDING PSVS AND BACKGROUND -
WEST SIDE OF SOUTH AREA**

Sample Location	Sample Depth (ft)	Chemical of Interest	Concentration (mg/kg)	Extent Evaluation Comparison Value ⁽¹⁾ (mg/kg)
SA1SB15	0-0.5	Benzo(a)anthracene	2.28J	0.62
		Benzo(a)pyrene	3.6J	0.062
		Benzo(b)fluoranthene	2.27J	0.62
		Copper	105	61
		Dibenz(a,h)anthracene	0.313	0.062
		Indeno(1,2,3-cd)pyrene	1.39J	0.62
		Lead	208	17.93
	1-2	Zinc	877	127
		Benzo(a)anthracene	4.21J	0.62
		Benzo(a)pyrene	4.88J	0.062
		Benzo(b)fluoranthene	5.34J	0.62
		Copper	73.2	61
		Dibenz(a,h)anthracene	0.817	0.062
		Indeno(1,2,3-cd)pyrene	4.37J	0.62
		Lead	395	17.93
		Zinc	1090	127

**TABLE 3 - DETECTED SOIL CONCENTRATIONS EXCEEDING PSVS AND BACKGROUND -
WEST SIDE OF SOUTH AREA**

Sample Location	Sample Depth (ft)	Chemical of Interest	Concentration (mg/kg)	Extent Evaluation Comparison Value ⁽¹⁾ (mg/kg)
SA2SB16	0-0.5	Benzo(a)anthracene	1.29J	0.62
		Benzo(a)pyrene	1.95J	0.062
		Benzo(b)fluoranthene	2.05J	0.62
		Chromium	40.6	30
		Dibenz(a,h)anthracene	0.347	0.062
		Indeno(1,2,3-cd)pyrene	1.44J	0.62
		Lead	45.8	17.93
	1-2	Zinc	235	127
		Aroclor-1254	3.42	0.83
		Benzo(a)anthracene	1.71J	0.62
		Benzo(a)pyrene	2.13J	0.062
		Benzo(b)fluoranthene	2.76J	0.62
		Chromium	45.6	30
		Copper	128	61
		Dibenz(a,h)anthracene	0.322	0.062
		Indeno(1,2,3-cd)pyrene	1.31J	0.62
		Lead	702	17.93
		Molybdenum	10.4	2
		Zinc	525	127

**TABLE 3 - DETECTED SOIL CONCENTRATIONS EXCEEDING PSVS AND BACKGROUND -
WEST SIDE OF SOUTH AREA**

Sample Location	Sample Depth (ft)	Chemical of Interest	Concentration (mg/kg)	Extent Evaluation Comparison Value ⁽¹⁾ (mg/kg)
SA3SB17	0-0.5	Benzo(a)anthracene	2.41J	0.62
		Benzo(a)pyrene	3.41J	0.062
		Benzo(b)fluoranthene	4.66J	0.62
		Copper	207	61
		Dibenz(a,h)anthracene	0.465	0.062
		Indeno(1,2,3-cd)pyrene	1.47J	0.62
		Molybdenum	2.24	2
	1-2	Zinc	412	127
		Aroclor-1254	11.5	0.22
		Benzo(a)pyrene	0.608J	0.062
SA4SB18	0-0.5	Benzo(b)fluoranthene	0.835J	0.62
		Copper	487	61
		Dibenz(a,h)anthracene	0.177	0.062
		Lead	252	17.93
		Mercury	0.85	0.1
		Zinc	865	127
		Aroclor-1254	0.734J+	0.22
		Barium	540J	462
		Benzo(a)pyrene	0.329J	0.062
		Lead	146J	17.93
		Zinc	414	127

**TABLE 3 - DETECTED SOIL CONCENTRATIONS EXCEEDING PSVS AND BACKGROUND -
WEST SIDE OF SOUTH AREA**

Sample Location	Sample Depth (ft)	Chemical of Interest	Concentration (mg/kg)	Extent Evaluation Comparison Value ⁽¹⁾ (mg/kg)
SA5SB19	0-0.5	Aroclor-1254	0.457	0.22
		Arsenic	11.5	8.66
		Benzo(a)pyrene	0.371J	0.062
		Lead	152J	17.93
		Molybdenum	2.69J-	2
		Zinc	412	127
SA6SB20	0-0.5	Dibenz(a,h)anthracene	0.132	0.062

Notes:

(1) Value from Table 1.

(2) Data qualifiers: J = estimated value; J- = estimated value, biased low; J+ = estimated value, biased high.

**TABLE 4 - DETECTED SOIL CONCENTRATIONS EXCEEDING PSVS AND BACKGROUND -
1 - 2 FT SAMPLE DEPTH INTERVAL**

Sample Location	Chemical of Interest	Concentration (mg/kg)	Extent Evaluation Comparison Value ⁽¹⁾ (mg/kg)
ND3SB04	1,2,3-Trichloropropane Trichloroethene	0.168 0.537	0.0034 0.1
SA1SB15	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Lead	4.21J 4.88J 5.34J 0.817 4.37J 395	2.3 0.23 2.3 0.23 2.3 151
SA2SB16	Aroclor-1254 Benzo(a)pyrene Benzo(b)fluoranthene Dibenz(a,h)anthracene Lead	3.42 2.13J 2.76J 0.322 702	0.83 0.23 2.3 0.23 151
SA3SB17	Aroclor-1254 Benzo(a)pyrene Lead Mercury	11.5 0.608J 252 0.85	0.83 0.23 151 0.391
SB2SB22	Aroclor-1254 Benzo(a)pyrene	2.84 0.38J	0.83 0.23
SB4SB24	Aroclor-1254 Benzo(a)pyrene Dibenz(a,h)anthracene	2.73 1.37J 0.324	0.83 0.23 0.23
SC3SB27	Dibenz(a,h)anthracene	0.606	0.23
SC4SB28	Benzo(a)pyrene Lead	1.2J 192J	0.23 151
SD3SB33	Benzo(a)pyrene	0.509J	0.23
SD5SB35	Aroclor-1254 Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Mercury	1.41 4.79 4.45J 5.97 1.23 2.79J 0.5	0.83 2.3 0.23 2.3 0.23 2.3 0.391

**TABLE 4 - DETECTED SOIL CONCENTRATIONS EXCEEDING PSVS AND BACKGROUND -
1 - 2 FT SAMPLE DEPTH INTERVAL**

Sample Location	Chemical of Interest	Concentration (mg/kg)	Extent Evaluation Comparison Value ⁽¹⁾ (mg/kg)
SF2SB44	Dibenz(a,h)anthracene	0.354J	0.23
SF3SB45	Arsenic	9.58	8.66
	Benzo(a)pyrene	0.966J	0.23
SF4SB46	Benzo(a)pyrene	0.921J	0.23
SG4SB56	Benzo(a)pyrene	0.248J	0.23
SG6SB59	Benzo(a)pyrene	0.276J	0.23
SI1SB69	Arsenic	9.38	8.66

Notes:

(1) Value from Table 2.

(2) Data qualifiers: J = estimated value.

TABLE 5 - PROPOSED PHASE 2 SOIL SAMPLE ANALYSES

Sample Location(s)	Sample Depth (ft)	Analytical Parameter
L20SB01	0-0.5	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Copper Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Lead Zinc
	1-2	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Copper Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Lead Zinc
L20SB02	0-0.5	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Copper Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Lead Zinc
	1-2	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Copper Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Lead Zinc
	4-5 ⁽¹⁾	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Copper Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Lead Zinc

TABLE 5 - PROPOSED PHASE 2 SOIL SAMPLE ANALYSES

Sample Location(s)	Sample Depth (ft)	Analytical Parameter
L20SB03	0-0.5	Aroclor-1254 Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Chromium Copper Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Lead Molybdenum Zinc
	1-2	Aroclor-1254 Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Chromium Copper Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Lead Molybdenum Zinc
	4-5 ⁽¹⁾	Aroclor-1254 Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Chromium Copper Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Lead Molybdenum Zinc

TABLE 5 - PROPOSED PHASE 2 SOIL SAMPLE ANALYSES

Sample Location(s)	Sample Depth (ft)	Analytical Parameter
L20SB04	0-0.5	Aroclor-1254 Barium Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Chromium Copper Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Lead Mercury Molybdenum Zinc
	1-2	Aroclor-1254 Barium Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Chromium Copper Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Lead Mercury Molybdenum Zinc
	4-5 ⁽¹⁾	Aroclor-1254 Benzo(a)pyrene Benzo(b)fluoranthene Copper Dibenz(a,h)anthracene Lead Mercury Zinc

TABLE 5 - PROPOSED PHASE 2 SOIL SAMPLE ANALYSES

Sample Location(s)	Sample Depth (ft)	Analytical Parameter
L20SB05	0-0.5	Aroclor-1254 Arsenic Barium Benzo(a)pyrene Lead Molybdenum Zinc
L20SB06	0-0.5	Aroclor-1254 Arsenic Barium Benzo(a)pyrene Lead Molybdenum Zinc
L20SB07	0-0.5	Aroclor-1254 Arsenic Benzo(a)pyrene Dibenz(a,h)anthracene Lead Molybdenum Zinc
ND3SB04	4-5 ⁽¹⁾	1,2,3-Trichloropropane Trichloroethene
SA1SB15	4-5 ⁽¹⁾	Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Lead
SA2SB16	4-5 ⁽¹⁾	Aroclor-1254 Benzo(a)pyrene Benzo(b)fluoranthene Dibenz(a,h)anthracene Lead
SA3SB17	4-5 ⁽¹⁾	Aroclor-1254 Benzo(a)pyrene Lead Mercury
SB2SB22	4-5 ⁽¹⁾	Aroclor-1254 Benzo(a)pyrene
SB4SB24	4-5 ⁽¹⁾	Aroclor-1254 Benzo(a)pyrene Dibenz(a,h)anthracene
SC3SB27	4-5 ⁽¹⁾	Dibenz(a,h)anthracene

TABLE 5 - PROPOSED PHASE 2 SOIL SAMPLE ANALYSES

Sample Location(s)	Sample Depth (ft)	Analytical Parameter
SC4SB28	4-5 ⁽¹⁾	Benzo(a)pyrene Lead
SD3SB33	4-5 ⁽¹⁾	Benzo(a)pyrene
SD5SB35	4-5 ⁽¹⁾	Aroclor-1254 Benzo(a)anthracene Benzo(a)pyrene Benzo(b)fluoranthene Dibenz(a,h)anthracene Indeno(1,2,3-cd)pyrene Mercury
SF2SB44	4-5 ⁽¹⁾	Dibenz(a,h)anthracene
SF3SB45	4-5 ⁽¹⁾	Arsenic Benzo(a)pyrene
SF4SB46	4-5 ⁽¹⁾	Benzo(a)pyrene
SG4SB56	4-5 ⁽¹⁾	Benzo(a)pyrene
SG6B59	4-5 ⁽¹⁾	Benzo(a)pyrene
SI1SB69	4-5 ⁽¹⁾	Arsenic
SB-201, SB-202, SB-203	0-0.5	SVOCs ⁽²⁾ Pesticides ⁽³⁾ Metals ⁽⁴⁾ PCBs ⁽⁵⁾
	1.5-2	VOCs ⁽⁶⁾ SVOCs ⁽²⁾ Pesticides ⁽³⁾ Metals ⁽⁴⁾ PCBs ⁽⁵⁾

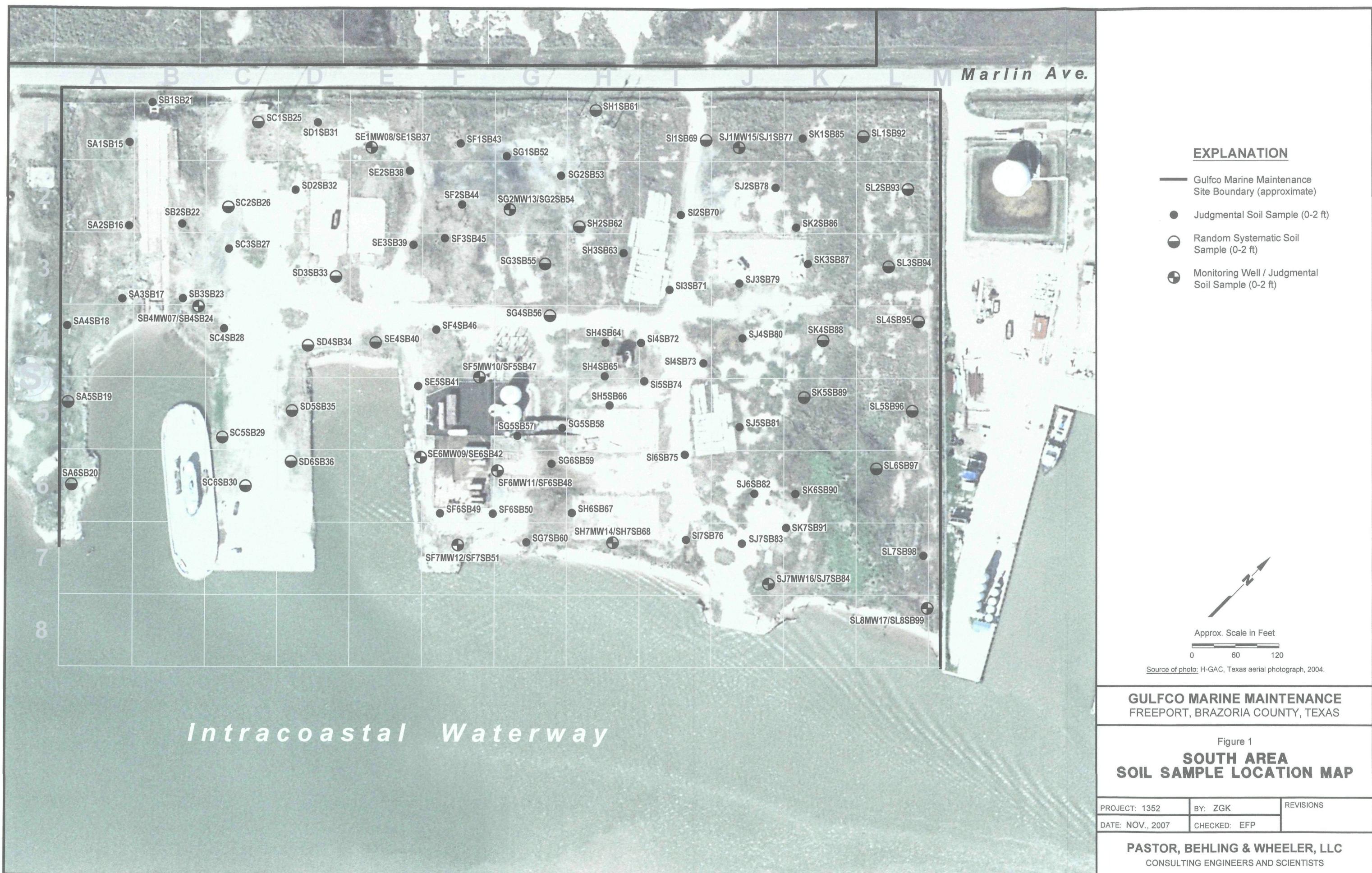
TABLE 5 - PROPOSED PHASE 2 SOIL SAMPLE ANALYSES

Sample Location(s)	Sample Depth (ft)	Analytical Parameter
SB-204, SB-205, SB-206	1-2 ⁽⁷⁾	VOCs ⁽⁶⁾ SVOCs ⁽²⁾ Pesticides ⁽³⁾ Metals ⁽⁴⁾ PCBs ⁽⁵⁾
	3-4 ⁽⁷⁾	VOCs ⁽⁶⁾ SVOCs ⁽²⁾ Pesticides ⁽³⁾ Metals ⁽⁴⁾ PCBs ⁽⁵⁾
	5-6 ⁽⁷⁾	VOCs ⁽⁶⁾ SVOCs ⁽²⁾ Pesticides ⁽³⁾ Metals ⁽⁴⁾ PCBs ⁽⁵⁾

Notes:

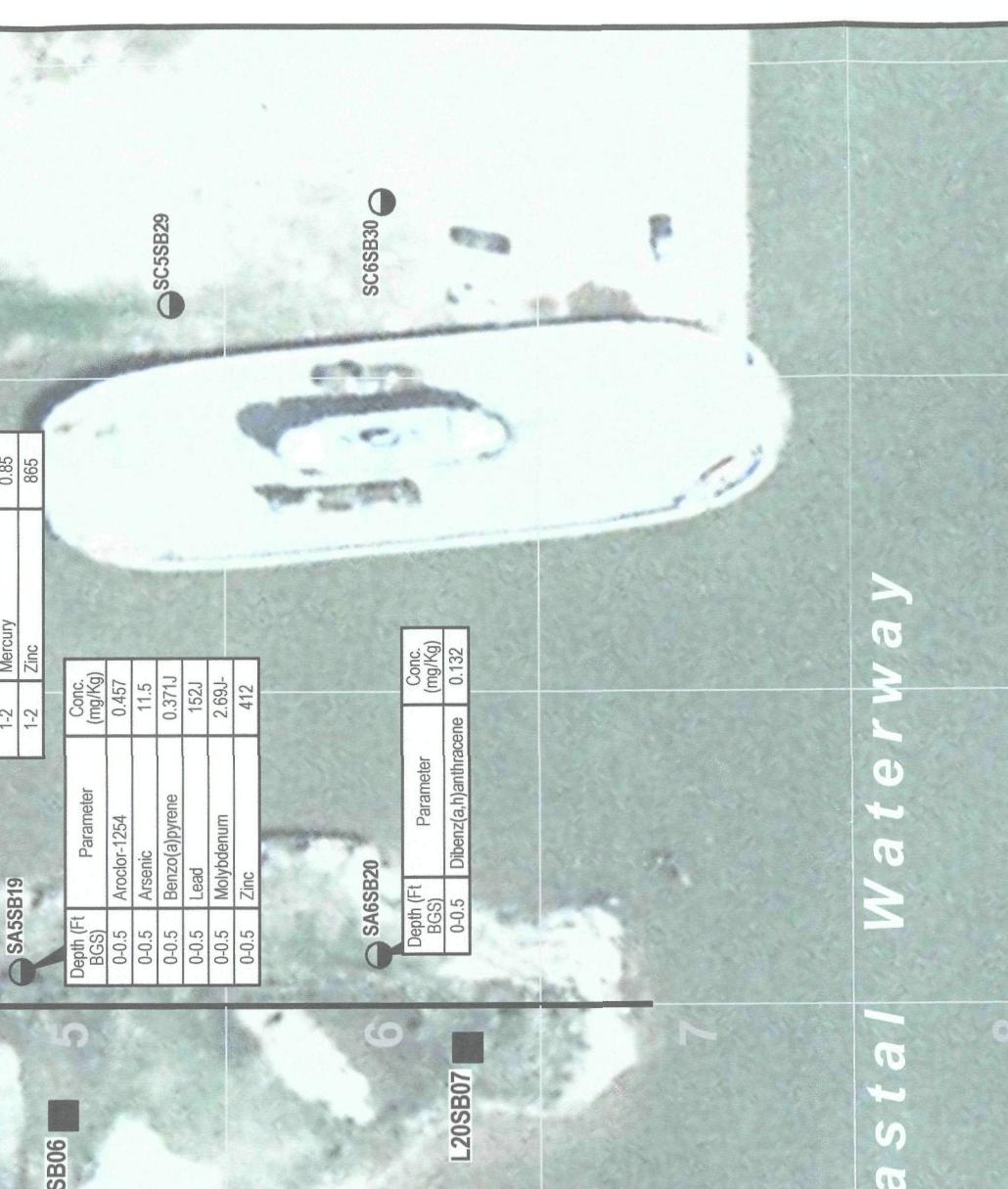
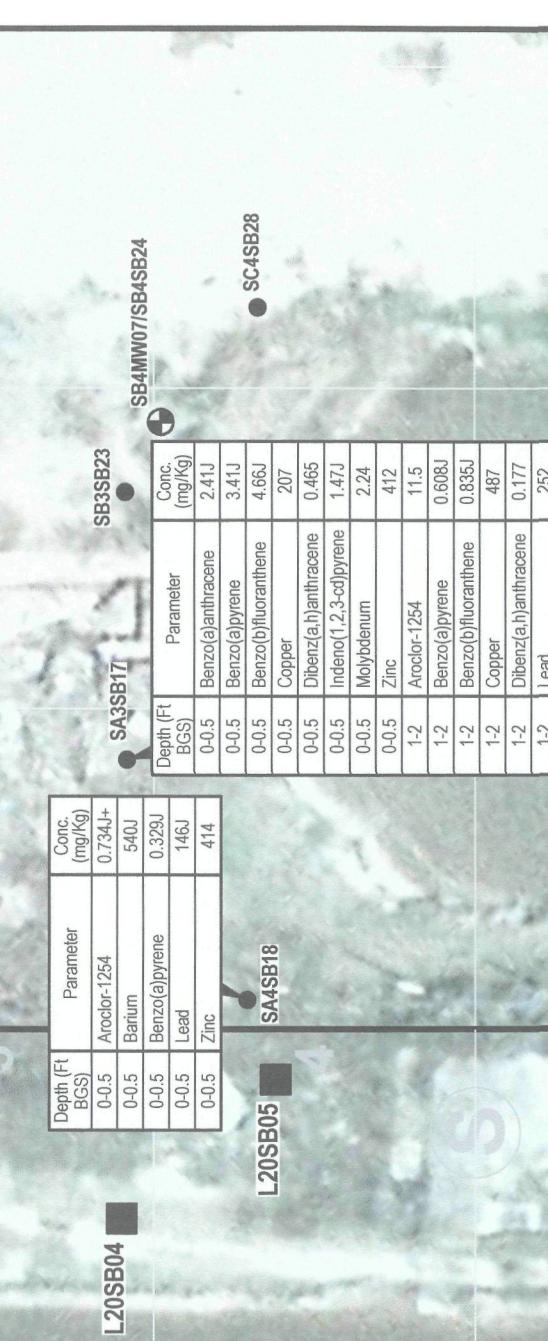
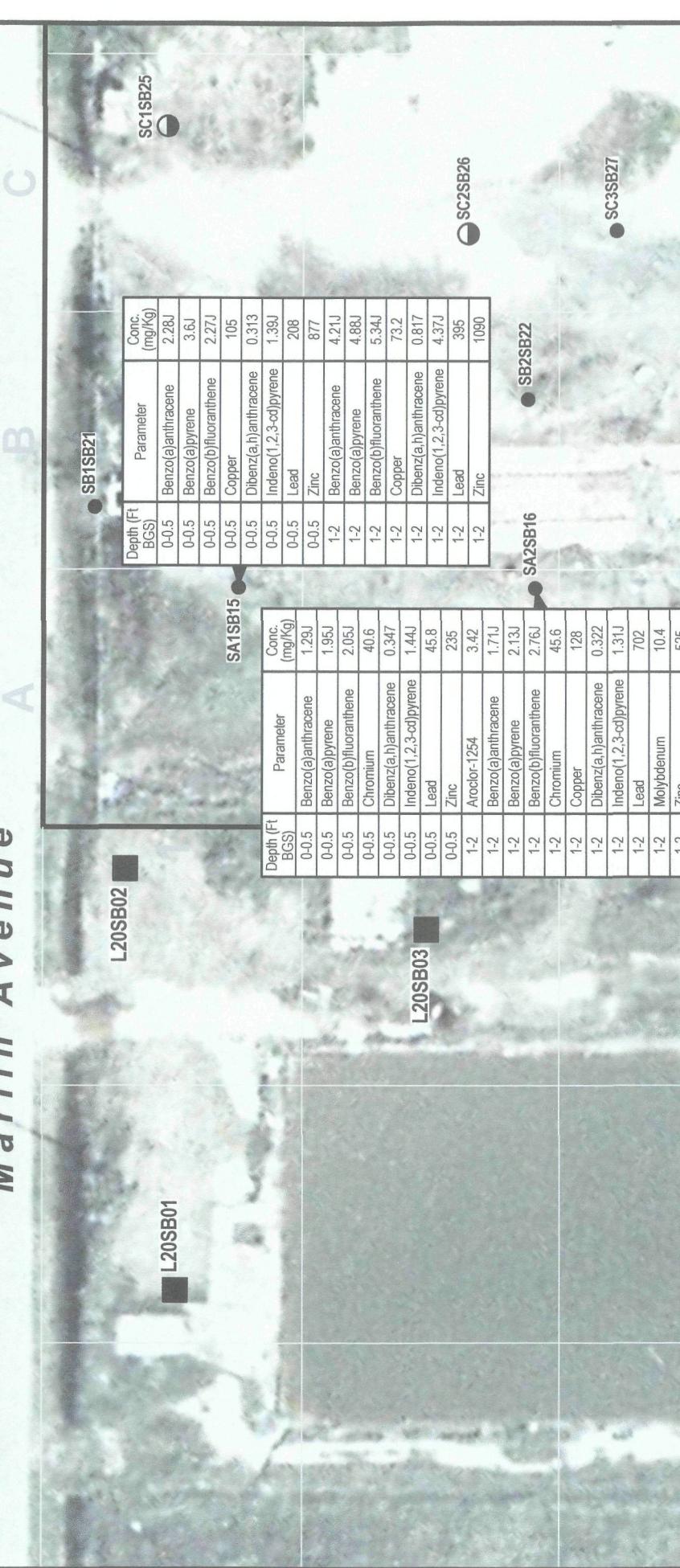
- (1) Proposed sample depth interval is 4 to 5 feet or one foot interval above saturated zone if saturated conditions encountered at depths less than 5 feet.
- (2) All SVOCs listed in Table B-1 of Field Sampling Plan
- (3) All pesticides listed in Table B-1 of Field Sampling Plan
- (4) All metals listed in Table B-1 of Field Sampling Plan, including chromium (VI)
- (5) All PCBs listed in Table B-1 of Field Sampling Plan
- (6) All VOCs listed in Table B-1 of Field Sampling Plan
- (7) If debris is encountered in borings SB-204, SB-205, or SB-206, soil samples for laboratory analysis from that boring will be collected (to the extent possible based on soil and debris type and debris thickness and depth) from 1 foot depth intervals immediately above the debris, immediately below the debris, and within the approximate center of the debris zone. If refusal is encountered, a soil sample for laboratory analysis will be collected from the depth interval immediately above the refusal point and an additional boring will be advanced approximately five feet from the original boring. A soil sample will be collected for laboratory analysis from this additional boring at the depth interval corresponding to where refusal was encountered in the previous boring.

FIGURES





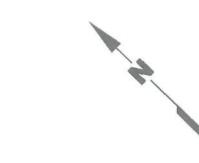
Marlin Avenue A



EXPLANATION

- Gulfco Marine Maintenance Site Boundary (approximate)
- Judgmental Soil Sample (0-2 ft)
- Random Systematic Soil Sample (0-2 ft)
- Monitoring Well / Judgmental Soil Sample (0-2 ft)
- Proposed Soil Sample Location

Note:
Data Qualifiers: J = Estimated value.
J- = Estimated value, biased low.
J+ = Estimated value, biased high.



DETECTED SOIL CONCENTRATIONS EXCEEDING CPSVs AND BACKGROUND WEST SIDE OF SOUTH AREA

GULFCO MARINE MAINTENANCE
FREEPORT, BRAZORIA COUNTY, TEXAS

Figure 3

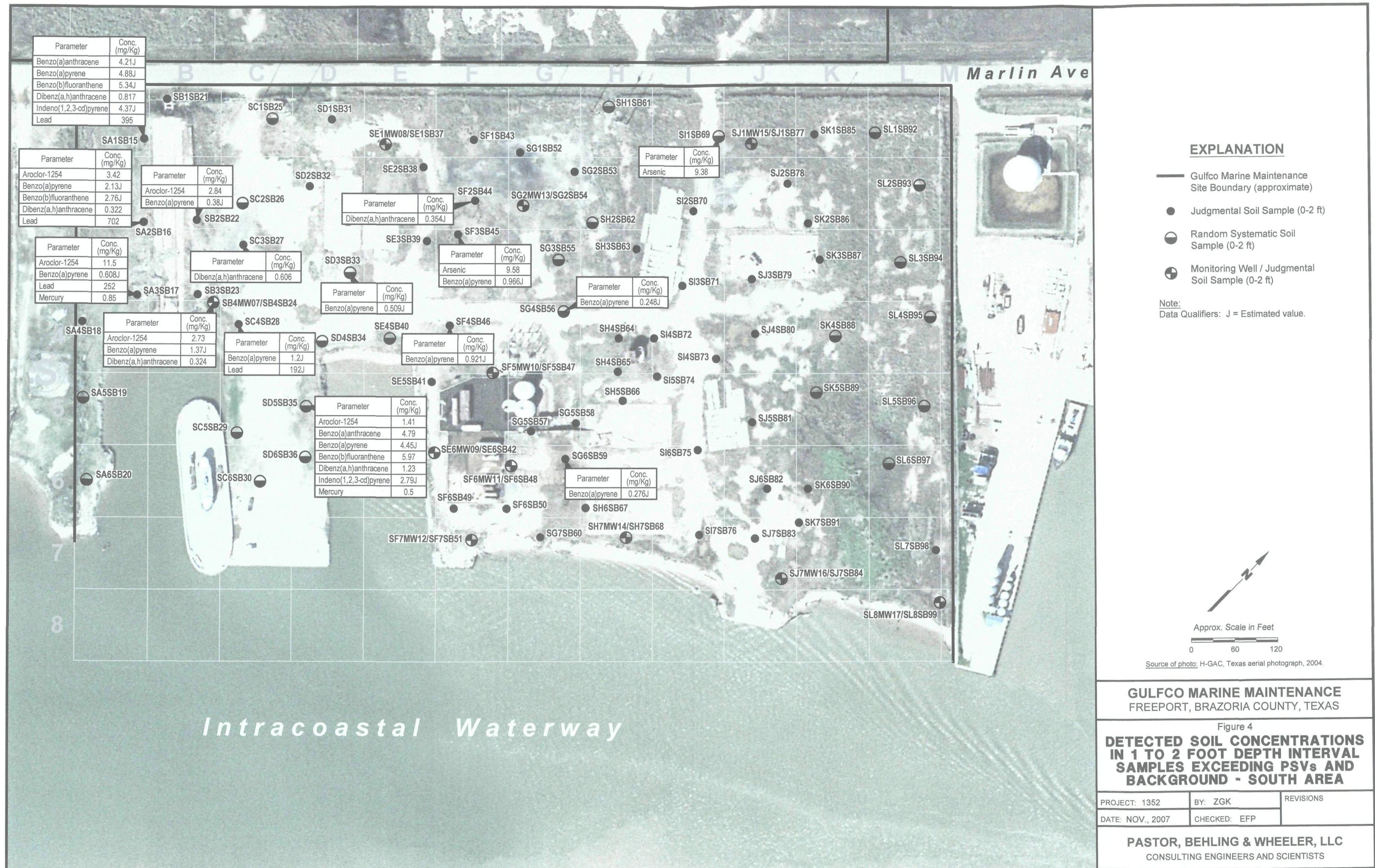
REVISIONS

PROJECT:	1352	BY:	ZGK	REVISIONS
DATE:	NOV., 2007	CHECKED:	EFP	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

Source of photo: H-GAC, Texas aerial photograph, 2004.

Intracoastal Waterway





**GULFCO MARINE MAINTENANCE
FREEPORT, BRAZORIA COUNTY, TEXAS**

Figure 5

**DETECTED SOIL CONCENTRATIONS
IN 1 TO 2 FOOT DEPTH INTERVAL
SAMPLES EXCEEDING PSVs AND
BACKGROUND - NORTH AREA**

PROJECT: 1352	BY: ZGK	REVISIONS
DATE: NOV., 2007	CHECKED: EFP	

PASTOR, BEHLING & WHEELER, LLC
CONSULTING ENGINEERS AND SCIENTISTS

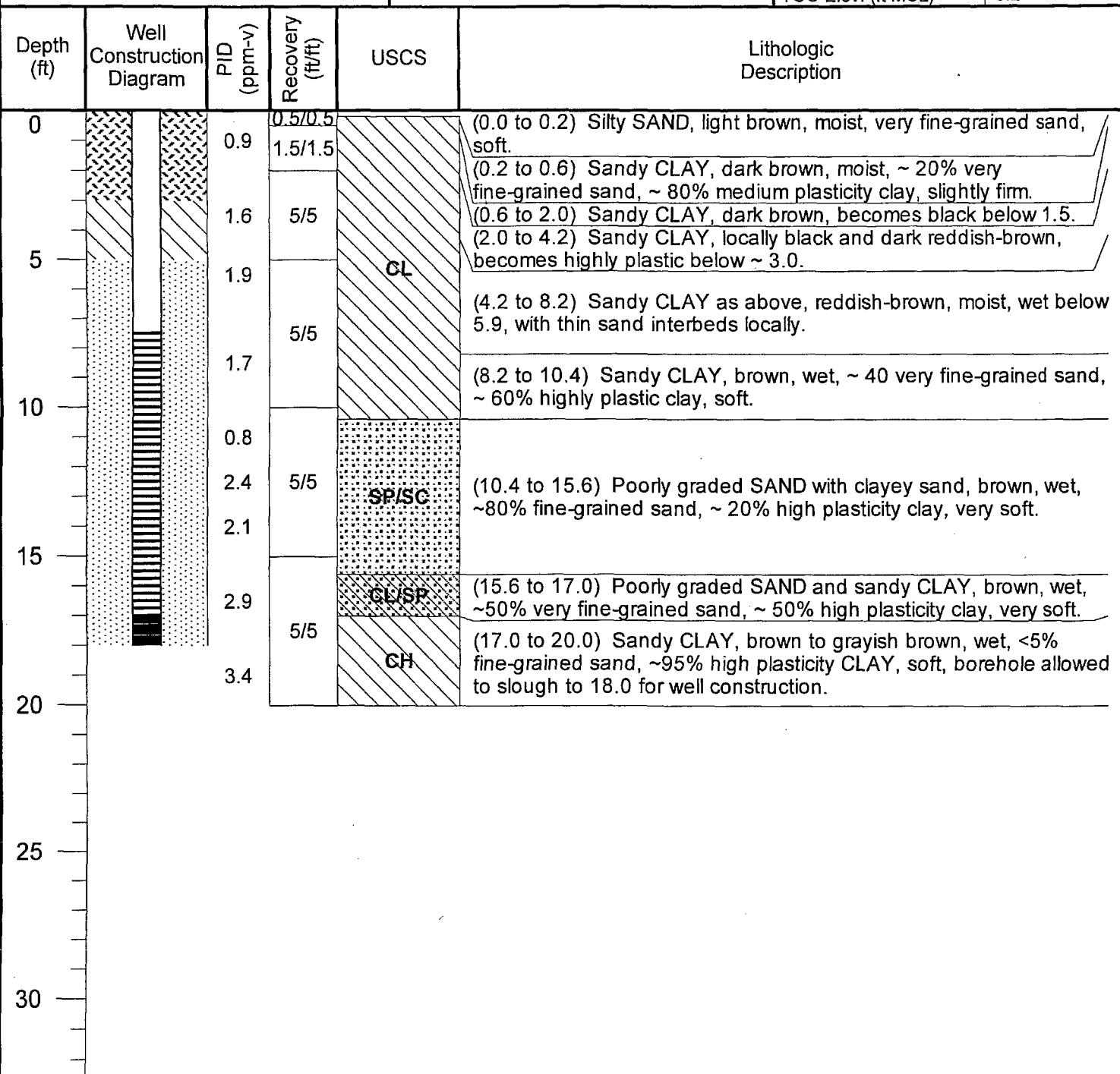


APPENDIX A
BORING LOGS FOR PROPOSED HYDRAULIC TESTING WELLS

PASTOR, BEHLING & WHEELER, LLC
Consulting Engineers and Scientists

Log of Boring: ND4MW03

Gulfco Marine Maintenance Superfund Site Freeport, TX	Completion Date:	07/17/06	Borehole Diameter (in.):	8.25
	Drilling Company:	Best Drilling Services, Inc.	Total Depth (ft.):	20
	Field Supervisor:	Tim Jennings, P.G.	Northing:	13554562.67
PBW Project No. 1352	Drilling Method:	Hollow Stem Auger	Easting:	3154758.06
	Sampling Method:	5 ft continuous core	Ground Elev. (ft. MSL):	3.2
			TOC Elev. (ft MSL)	6.2



PBW

Pastor, Behling & Wheeler, LLC
2201 Double Creek Dr., Suite 4004
Round Rock, TX 78664
Tel (512) 671-3434 Fax (512) 671-3446

Well Materials

- (0.0 to 7.5) Casing, 2" sch. 40 PVC
- (7.5 to 17.5) Screen, 2" sch. 40 PVC, 0.01 slot
- (17.5 to 18.0) End Cap

Annular Materials

- (0.0 to 3.0) Portland Cement with ~ 5% bentonite gel
- (3.0 to 5.0) Bentonite chips, 3/8"
- (5.0 to 18.0) Sand, 20/40 silica

This boring log should not be used separately from the original report.

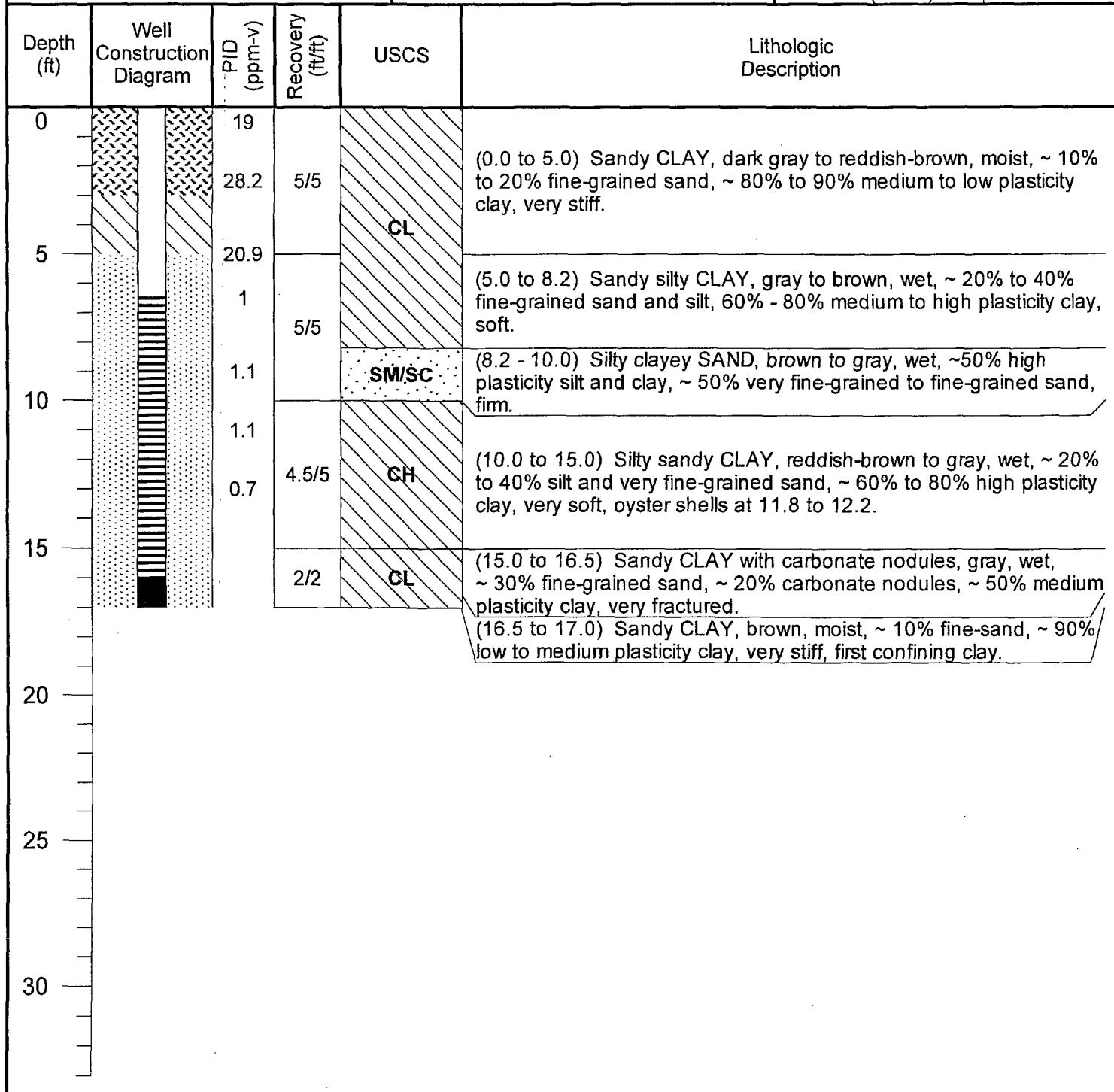
PASTOR, BEHLING & WHEELER, LLC
Consulting Engineers and Scientists

Log of Boring: NE1MW04

Gulfco Marine Maintenance
Superfund Site
Freeport, TX

PBW Project No. 1352

Completion Date:	07/21/06	Borehole Diameter (in.):	8.25
Drilling Company:	Best Drilling Services, Inc.	Total Depth (ft):	17
Field Supervisor:	Tim Jennings, P.G.	Northing:	13555097.66
Drilling Method:	Hollow Stem Auger	Easting:	3154385.63
Sampling Method:	5 ft continuous core	Ground Elev. (ft. MSL):	2.1
		TOC Elev. (ft MSL)	4.9



PBW

Pastor, Behling & Wheeler, LLC
2201 Double Creek Dr., Suite 4004
Round Rock, TX 78664
Tel (512) 671-3434 Fax (512) 671-3446

Well Materials

- (0.0 to 6.5) Casing, 2" sch. 40 PVC
- (6.5 to 16.5) Screen, 2" sch. 40 PVC, 0.01 slot
- (16.5 to 17.0) End Cap

Annular Materials

- (0.0 to 3.0) Portland Cement with ~ 5% bentonite gel
- (3.0 to 5.0) Bentonite chips, 3/8"
- (5.0 to 17.0) Sand, 20/40 silica

This boring log should not be used separately from the original report.

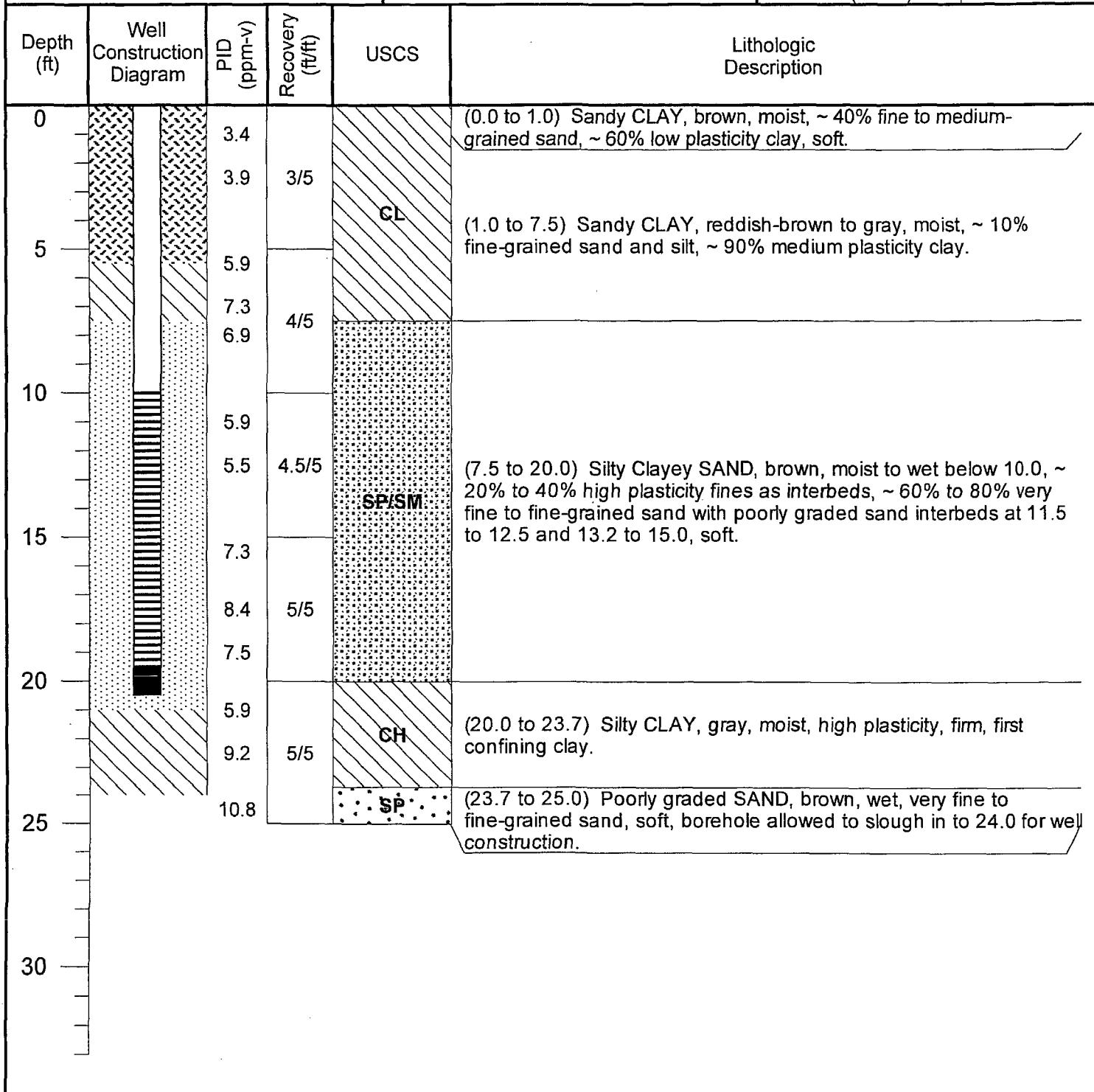
PASTOR, BEHLING & WHEELER, LLC
Consulting Engineers and Scientists

Log of Boring: SJ1MW15

Gulfco Marine Maintenance
Superfund Site
Freeport, TX

PBW Project No. 1352

Completion Date:	07/19/06	Borehole Diameter (in.):	8.25
Drilling Company:	Best Drilling Services, Inc.	Total Depth (ft):	25
Field Supervisor:	Tim Jennings, P.G.	Northing:	13554764.11
Drilling Method:	Hollow Stem Auger	Easting:	3155165.2
Sampling Method:	5 ft continuous core	Ground Elev. (ft. MSL):	2.5
		TOC Elev. (ft MSL)	5.61



PBW

Pastor, Behling & Wheeler, LLC
2201 Double Creek Dr., Suite 4004
Round Rock, TX 78664
Tel (512) 671-3434 Fax (512) 671-3446

Well Materials

- (0.0 to 10.0) Casing, 2" sch. 40 PVC
- (10.0 to 20.0) Screen, 2" sch. 40 PVC, 0.01 slot
- (20.5 to 20.5) End Cap

Annular Materials

- (0.0 to 5.5) Portland Cement with ~ 5% bentonite gel
- (5.5 to 7.5) Bentonite chips, 3/8"
- (7.5 to 21.0) Sand, 20/40 silica
- (21.0 to 24.0) Bentonite chips, 3/8"

This boring log should not be used separately from the original report.

APPENDIX B

SAMPLE HANDLING DETAILS AND ANALYTICAL METHODS FOR PROPOSED NATURAL ATTENUATION SCREENING PARAMETERS

TABLE B-1
 PARAMETERS AND METHOD SPECIFICATIONS
 MEDIA: GROUNDWATER

Intended Use: Natural attenuation assessment

QC Level: 100% Level II

LABORATORY PARAMETERS	SAMPLING SOP	MEASUREMENT TECHNIQUE	PREPARATION METHOD	ANALYSIS METHOD
CHEMICAL ANALYSES				
Methane, Ethane, Ethene (Dissolved)	PBW SOP-10	GC	NA	RSK 175
Nitrate	PBW SOP-10	Colorimetric	NA	EPA 353.2
Sulfide	PBW SOP-10	Colorimetric	NA	EPA 376.2
Total Organic Carbon	PBW SOP-10	Carbonaceous Analyzer	NA	SW-846 9060

TABLE B-2
SAMPLE CONTAINER, PRESERVATION AND HOLDING TIME REQUIREMENTS
MEDIA: GROUNDWATER

LABORATORY PARAMETERS	CONTAINER	PRESERVATION	HOLDING TIME
Methane, Ethane, Ethene (Dissolved) ⁽¹⁾	G-TLS	HCl to pH < 2 Cool to 4 C	14 days
Nitrate	P, G	Cool to 4 C	48 hours
Sulfide	P, G	NaOH & ZnAC Cool to 4 C	7 days
Total Organic Carbon	P, G	HCl to pH < 2 ⁽²⁾ Cool to 4 C	28 days

P – Polyethylene G – Glass TLC – Teflon®-lined cap TLS – Teflon®-lined septum

Notes:

- (1) Samples shall not contain headspace or air bubbles.
- (2) H₂SO₄ or solid NaHSO₄ are also acceptable preservatives.

TABLE B-4
QUALITY CONTROL OBJECTIVES
MEDIA: GROUNDWATER

ANALYTE	METHOD ⁽¹⁾	TARGET MDL ⁽²⁾ (mg/L)	TARGET MQL ⁽³⁾ (mg/L)	MAX %RSD ⁽⁴⁾	MIN r (Correl. Coeff)	ICV/CCV ⁽⁵⁾ REC.	BLANK CONC. ⁽⁶⁾	LCS MS/MSD REC. ⁽⁷⁾	ANALYTICAL DUP RPD	FIELD DUP RPD	SU REC. ⁽⁷⁾	IS AREA ⁽⁸⁾
Methane (Dissolved)	RSK 175	0.0015	0.002	20	0.99	+/-15	<MQL	60-140	40	NA	NA	NA
Ethane (Dissolved)	RSK 175	0.0015	0.002	20	0.99	+/-15	<MQL	60-140	40	NA	NA	NA
Ethene (Dissolved)	RSK 175	0.0015	0.002	20	0.99	+/-15	<MQL	60-140	40	NA	NA	NA
Nitrate	EPA 353.2	0.01	0.01	NA	NA	70-130	<MQL	70-130	30	NA	NA	NA
Sulfide	EPA 376.2	0.02	0.02	NA	NA	70-130	<MQL	70-130	30	NA	NA	NA
Total Organic Carbon	9060	1	1	NA	NA	70-130	<MQL	70-130	30	NA	NA	NA

Notes:

- (1) Unless otherwise indicated, analytical methods are from EPA SW-846 "Test Methods for Evaluating Solid Waste."
- (2) Method Detection Limits are determined by the laboratory using the procedures in 40 CFR Part 136, Appendix B. The MDL listed here is the maximum method detection limit that will support the project performance objectives based on the Preliminary Screening Values (PSVs). The laboratory MDL will likely be lower than those listed for most analytes but the target MDL may not be achievable for a few analytes. Additionally, Sample Detection Limits (which are adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and take into account sample characteristics, sample preparation, sample cleanup, and analytical adjustments including dry-weight adjustments) will be higher.
- (3) Method Quantitation Limits correspond to the lowest non-zero concentration standard in the laboratory's initial calibration curve calculated using the normal aliquot sizes and final volumes prescribed in the analytical method. The MQL listed here is based on typical laboratory performance. The laboratory MQL may be different. Additionally, Sample Quantitation Limits (which are adjusted to reflect sample-specific actions, such as dilution or use of smaller aliquot sizes than prescribed in the analytical method, and take into account sample characteristics, sample preparation, sample cleanup, and analytical adjustments including dry-weight adjustments) will be higher.
- (4) Per the analytical methods for organics, the %RSD for an individual analyte may exceed the criteria as long as the mean %RSD for all calibrated analytes is within the criteria. For data qualification purposes, the %RSD criteria will be applied to each individual analyte and the data flagged accordingly. For GC/MS analyses, the analytical method also includes criteria for the Relative Response Factor (RRF) for a subset of the calibrated analytes. For data qualification purposes, a minimum RRF criteria of 0.05 will be applied to each individual analyte and the data flagged accordingly.
- (5) Per the analytical methods for organics, the CCV response for an individual analyte may be outside the criteria as long as the mean CCV response for all calibrated analytes is within the criteria. For data qualification purposes, the CCV criteria will be applied to each individual analyte and the data flagged accordingly.
- (6) Criteria apply for all blank types including method blanks, calibration blanks, equipment blanks, and trip blanks. For data qualification purposes, blank concentrations for all positively identified analytes (i.e., above the detection limit) will be assessed and the data flagged accordingly. However, laboratory corrective action is instituted only for concentrations above the quantitation limit.
- (7) Criteria are for data qualification purposes. The laboratory shall monitor performance and institute routine corrective action using the laboratory-established limits.
- (8) Expressed as percent of area for internal standard in midpoint calibration standard.

TABLE B-5 - METHOD SELECTION WORKSHEET - GROUNDWATER

Analytes		Reporting Requirement (Y or N)	Medium	Critical Parameters				Routine Available Methods
Chemicals of Interest	CAS No.			ID Only (ID) or ID Plus Quantitation (ID+Q)	Preliminary Screening Value (PSV)	Target Method Detection Limit	Units	
Methane (Dissolved)	74-82-8	Y	Groundwater	ID+Q	NV	1.50E-03	mg/L	RSK 175
Ethane (Dissolved)	74-84-0	Y	Groundwater	ID+Q	NV	1.50E-03	mg/L	RSK 175
Ethene (Dissolved)	74-85-1	Y	Groundwater	ID+Q	NV	1.50E-03	mg/L	RSK 175
Nitrate	14797-55-8	Y	Groundwater	ID+Q	NV	1.00E-02	mg/L	EPA 353.2
Sulfide	18496-25-8	Y	Groundwater	ID+Q	NV	2.00E-02	mg/L	EPA 376.2
Total Organic Carbon	C-012	Y	Groundwater	ID+Q	NV	1.00E+00	mg/L	SW-846 9060

Notes:

NV - No value established